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Vol. CLXXVII No. 2317 WITH WHICH IS INCORPORATED THE GRAPHIC JUNE 17 1944

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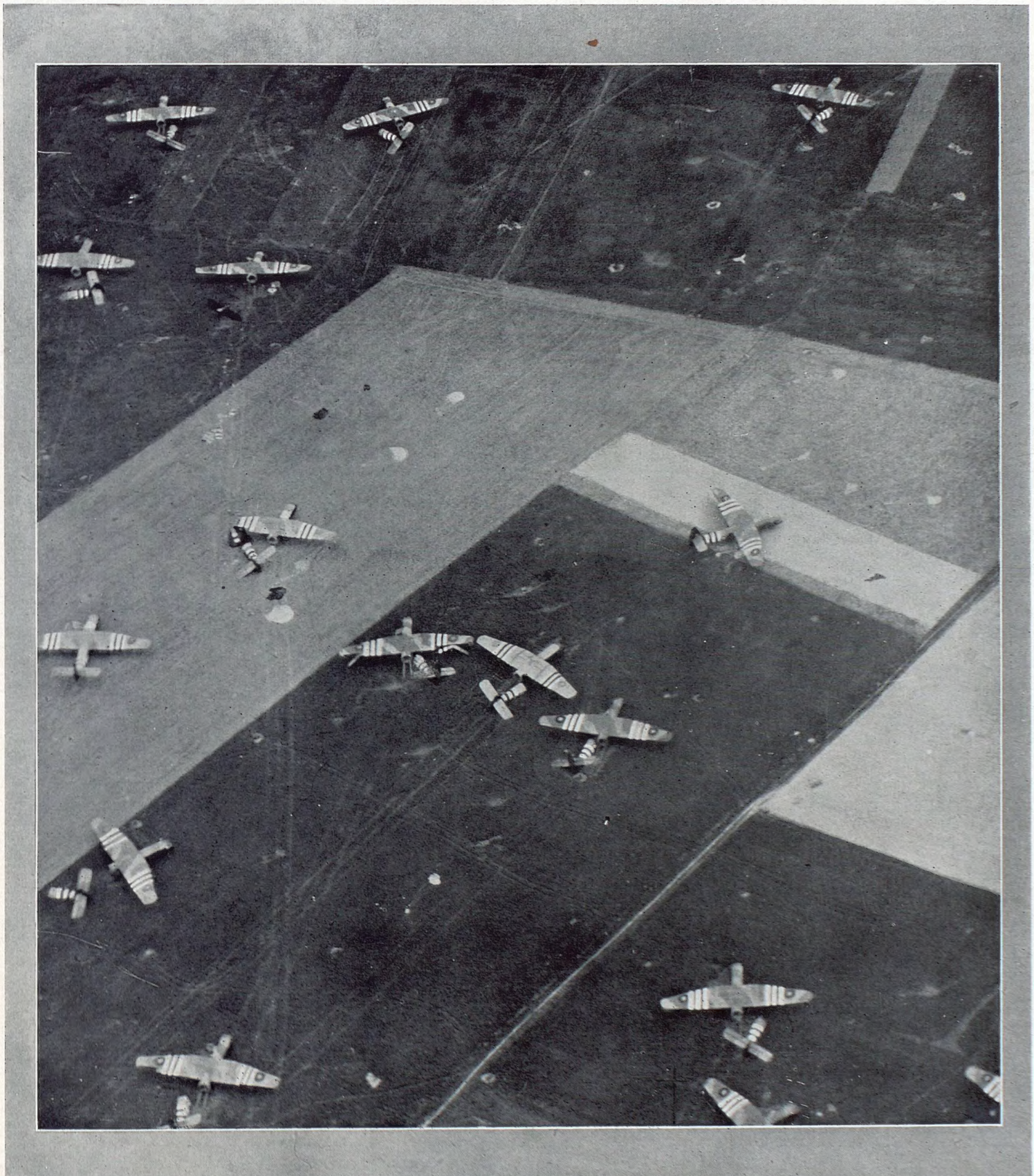
My Goodness—My GUINNESS

G.E.1192

Volume CLXXVII No. 2317 The SPHERE, London, June 17, 1944

THE SPHERE
With which is incorporated "THE GRAPHIC"
The Empire's Illustrated Weekly



HOW THE FIRST LANDINGS IN FRANCE WERE MADE BY GLIDER AND PARACHUTE: AN R.A.F. RECONNAISSANCE PICTURE SHOWING BRITISH HORSA GLIDERS AND ABANDONED PARACHUTES, after Allied airborne landings had been made in the Normandy fields to the north-east of the town of Caen

Even before the landing craft had touched down on the beaches off the northern coast of France, airborne troops had already been dropped at certain strategic points inland, behind the German "Atlantic Wall." The task of these picked troops was to secure vital objectives, cut communications, paralyse German movements, and then link up with our seaborne forces. How far these objects were achieved, the whole world now knows. Horsa gliders, towed by Dakota aircraft, were employed: they had to come down in fields and open spaces where the Germans had planted obstacles for their destruction. Casualties were incurred, and some of the troops were unable to carry out their designated tasks: but—in general—the airborne invasion was brilliantly achieved. The fuselages of the gliders seen in the above picture are not broken, as it would appear: they are capable of being detached from the wings, thus enabling the glider to be unloaded quickly. Lying all over the field are the parachutes abandoned by paratroops, who landed at the same spot

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A WAR NEWSLETTER—No. 250

1, NEW OXFORD STREET, W.C.1.

Invasion.—It has come at last (June 5-6), announced to us in time for luncheon on the 6th in a perfectly matter-of-fact way. No preface, no flourish, just an item of news. Four thousand-odd ships conveyed the Allies to the Normandy shores. Para-troops in thousands landed behind the German lines, and the military and civil chiefs had no reason to be dissatisfied, so far as first reports went. Indeed, the sea obstacles proved less difficult than was anticipated. We wait for news, henceforward, hourly, minute by minute. . . . It crowds all else out. And yet for me, a weekly journalist, that is *not* so. Invasion news will be ancient history always before *I* see print. It is also news told and re-told to infinity. There is good excuse for me to treat it as one of many, not a sole, topic. It is better so. I estimate that on June 5 the number of persons in England alone with better information for prophesying zero hour than I, as between six and seven millions. No sounds, sights, rumours or hints on June 4 or 5 put *me* wise to that hour and date. Sights and noises were normal. I was one of the majority; all in the dark and so turned upside down. Progress reports? That were coals sent to Newcastle. You in the Strand or Holborn know better than I where we are and how we stand. It is a drama and a tragedy and an epic, among the greatest in history. The curtain has risen and we are thankful. Waiting had become almost unbearable in the dim light. Now the lights are turned on the stage. At the latest moment open to me for commentary, the great adventure seems to be proceeding in the main according to our plan, and in some particulars beyond expectation. That is grand news. This for a beginning of one phase

Land of Memory.—How many Englishmen in their deeper anxieties must spare regret for the inevitable scarring of the fair face of Normandy; for many of us the first experience of foreign travel and of France. As children, we used to take our bicycles to Le Havre and visit all those charming towns and villages and ancient castles which are bound up with the career of the Conqueror and for ever dear to Englishmen. Bayeux, with its famous roll of embroidery (safely underground, I hope), Evreux, Lisieux, Caen, with its two famous Abbayes; Arques, Chateau Gaillard, Falaise, Caudebec, Beauvais, Dives, Les Andelys, not to speak of Rouen and, loveliest of all, Chartres. All these are in danger of destruction, and the charming countryside also, with its rolling downs and plains and orchards; so reminiscent of parts of southern England and bearing place-names which are retained in the surnames and titles of many of our oldest English families—Carteret, Granville, and so on. And this land was to be seared on our memories again by the war of 1914-18. Many of us first landed at Le Havre, came to know Rouen well and every street in Amiens and all the beaches between Boulogne and the delightful sands of Villers sur Mer. For me, perhaps, of all these memories Eu holds first place, or shares it with Senarpont.

Eternal City—Still.—June 4-5, 1944, will be a great date in the long history of Eternal Rome. On that date the city was saved from destruction, at least by land armies, and perhaps for all time and from all methods of warfare. Rome has been saved and by-passed. The Pope's prayers have been heard, and it may be that henceforth his pronouncements will be less equivocal. No longer speaking as the Head of a neutral State, an island in a sea of contending armies, he may boldly speak out as the Head of a Church, naming the aggressor and the criminal, and gaining thereby the authority which that isolated and splendid position should hold in Christian civilisation. And now that Rome is inside the boundaries of civilisation and freedom once more, the time has come for King Victor Emmanuel to fulfil his pledge and lay his crown aside. The Germans will claim to have spared Rome for the sheer respect for Culture which they have always shown! Perhaps it was culture; perhaps it was the strategy of Alexander; perhaps it was Hitler's still lively loyalty to Mussolini, a desire to save for his fellow criminal something from the wreck of their bloody

THE ALLIED COMMANDERS INSPECT THE LANDING BEACHES DURING THE INVASION. On the deck of H.M.S. "Apollo," after their conference on board the warship. For four and a half hours during the afternoon of Wednesday, June 7—the second day of the invasion—General Eisenhower, Allied Supreme Commander, and Admiral Sir Bertram Ramsay, Allied Naval Commander, cruised off the invasion beaches and held a series of conferences with the operational commanders. During the cruise General Montgomery and Admiral Kirk, of the U.S. Navy, came aboard to meet them. General Eisenhower and Admiral Ramsay both wore lifebelts: General Montgomery wore corduroys and fleece-lined leather jacket

complicity in crime; perhaps he hoped to set an example of how German cities should be treated.

"There was a Brutus once that would have brook'd
The eternal devil to keep his state in Rome,
As easily as a King."

"Old and true" and apt, no doubt at all, as a quotation. Meanwhile, every civilised human being heaves a sigh of relief. At least one nameless crime will not be chalked up by an undiscriminating Posterity to the men of this generation.

The Pope's Appeals.—It was natural that the Pope should appeal for immunity for Rome. None but a barbarian could wish one stone of Rome to be disturbed. It is natural that the Pope should appeal for a just peace and an early peace. There is none but madmen who do not pray for peace, just and early. It is sad that the Pope's appeals fall on so many deaf ears. And why do they? Because the Pope is in a difficult position. He is the head of a Church and of a State. As Head of a State, his utterances require diplomacy. But there is no diplomacy or compromise required of those who plump for Apollos or Paul, for evil or good. If the Pope thinks (with Goebbels) that the Nazis were forced into war in 1939 because of the plots and preparations by England, America and Russia to destroy Germany utterly, I understand why his appeals may sound hollow to the Allies so far as concerns an amnesty peace. If he *doesn't* think with Goebbels, why doesn't he come out into the open and declare for Paul and the right, and not hedge with Apollos and sin? A just peace connotes punishment of the guilty. The German people are responsible for the rise of Hitler. Those who still remember Chamberlain and his umbrella can have little doubt that our preparations for destroying Germany utterly were little advanced in '38 and '39. And America's! And as late as 1940 there was not much evidence of complicity in the great plot to destroy Germany between Britain and Russia! One journal splashed the headline, "Pope says: Make the World safe from Nazism.' I could not find these words in his broadcast. If, indeed, they were spoken, then I think this latest appeal will have been spoken to a wider and more appreciative audience than have his earlier utterances. But I do not underestimate his difficulties nor those of any humanitarian who tries to separate the combatants in a dog fight to the death.

Exhaustion-Point.—Another batch of reports from "inside Germany," dealing with the nervous exhaustion and apathy of the people especially the older folk, impress me more than such reports did a few weeks ago. I am better able to assess the causes of such complaints, and the effects. It is probably fair to say that the strain and stress put on the middle-aged in Britain since 1939, grievous as they have been, have not approached 50 per cent. of that put upon the middle-aged of the Germany that is not bomb-proof. I do not suppose those German elderlies during five years of war have had better food, more holidays, easier living conditions and, on the average, less anxiety than their British counterparts. In the view of many doctors in *this* country, a large proportion of elderly folk engaged in abnormally heavy war work, are "on the verge"; near enough to breaking-point. It seems that the men go first, the women are just a little tougher (or more obstinate) I don't doubt it.

"For men must work and women must weep,
And the sooner it 's over, the sooner to sleep."

Can you cite in the range of poetry two lines more completely inappropriate to the conditions of to-day or to the plain duty of humanity to-morrow? If they were apposite when Charles Kingsley wrote them, perhaps they account for much that we have been through. But I dare say the Vicar of Eversley merely needed a rhyme. Reasoning coolly, and without exaggeration, it is possible to *me* to accept the reports from inside Germany to-day as not improbable over-statements. The conclusion follows that when the crash comes inside Germany, it will be of the suddenest and will be very complete, and that then, for a time at least, not a high proportion of the elderly in Germany will "give much trouble"—except to the undertakers or, at best, to the doctors. How can any of us doubt that nervous-exhaustion-point is very near for millions all over Europe, and that this health factor may play a key role yet in hastening the end of the war, and very possibly in handicapping or delaying the resettlement that follows war? Planners should keep their eye on this possible snag. The ill-effect of a long and total war on human reserves of health was made plain enough in 1919.

Spiritual Leadership.—The King's address to the nation and Empire on Invasion Day was a timely instance of spiritual leadership from the Throne. I made the point a few years ago, in a book, that for generations spiritual leadership from the Throne had neither been asked for nor offered, until King George V revived this vital function of sovereignty during the war of 1914-18. That example—signal and novel—has been continued by his son, our present King (and the Queen), as has the wartime example of courage, service, simplicity and sacrifice which King George V and Queen Mary set. I cannot trace back with accuracy the date in English history when spiritual leadership was last offered from the Throne. It was back beyond Stuarts and Hanoverians. Queen Victoria's virtuous life was doubtless a silent example, chiefly felt in the distant parts of her Empire and in India especially. But she lived retired and behind shutters. Edward VII offered, indeed, a leadership of a lesser kind. In the anxious days of 1914-18 and 1939-44 the nation was better ground for the seeds of spiritual leadership to flower in, and King George V and King George VI have taken a great opportunity, which all men who care for Britain and Christianity must hope will produce lasting benefit to, and enhance the value of, the British Throne and peoples. But the call is for a spiritual revival which will survive our time of danger and continue into the years of peace. Only so can we hope to avoid a third act to the tragedy of humanity.

THE OLD STAGER

FRANCE INVADED

The Liberation of Western Europe Begins

—First Pictures from the Beaches and Battle Zones in Normandy

ONE OF THE BEACHHEADS ON THE NORTHERN COAST OF FRANCE : Protected by gunfire from Allied Naval Units out at sea, and under cover of a fleet of barrage balloons, British and American landing vessels pour their men and equipment on to the shore. When this picture was taken, this beach was still being fired on by German guns. As far as the eye can see are ships and more ships : inshore, the smaller craft are disgorging their supplies and piling them up on the beaches

ALLIED GLIDER TROOPS LAND IN NORMANDY, and at once dig positions in the field in which they landed. These men did fine work in support of the landings by holding important bridges and engaging the enemy well inland. Special Service Troops linked up with them and consolidated the positions previously gained

AMERICAN PARATROOPS REST IN ST. MERE EGLISE. This town lies on the main road from Caen to Cherbourg : it was captured by the Americans at the end of last week. In the picture, paratroops are seen resting by the road-side in the town after mopping-up operations and watching their own transports pass through to the next objective

BRITISH COMMANDOS PASSING THROUGH THE STREETS OF A TOWN NEAR CAEN. Their faces are still streaked with paint, and they are accompanied by their own lorries carrying their equipment. Villagers and townsfolk line the pavements to watch the invaders pass

THE TOWN OF ISIGNY AFTER ITS CAPTURE. After the artillery and Air Force had finished with this important Nazi stronghold, its main street was reduced to this state. American infantry then moved in to clear it of German snipers and machine-gunners

THE INVASION OF FRANCE (*continued*)—How the Men Landed on the Beaches

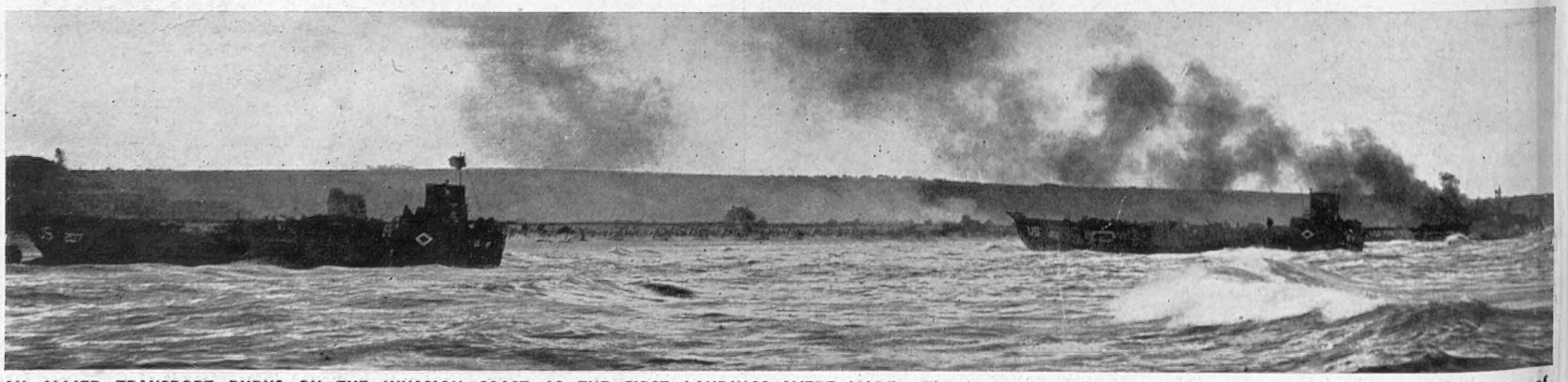
THE COAST OF FRANCE AS THE ALLIED TROOPS MADE THEIR FIRST LANDING : Note the enemy defences of steel and concrete, on which some of the Allied transports have been wrecked. The "Atlantic Wall," however, is not a solid structure : its obstacles were designed to impale the amphibious "ducks" and expose them to the German fire ; the barriers of the "Wall" are of five main types. The landings were made with less losses than expected

TANKS LAND ON THE BEACHHEAD : They were taken ashore successfully with the first assault troops. The first task after the landing was to clear away the German obstacles so that more material and equipment could be landed quickly from the vessels which followed

BRITISH INFANTRY AND RED CROSS PERSONNEL WADING ASHORE on to a Normandy beach from Infantry Landing Craft after their comrades had made the initial assaults. The larger vessels were able to come quite close inshore, as the picture given above shows

AMERICAN SOLDIERS COME UP ON TO THE BEACH with all sorts of warlike equipment. Some of the assault troops which stormed ashore went down under a withering German cross-fire, but by three o'clock in the afternoon they were all firmly ashore and advancing

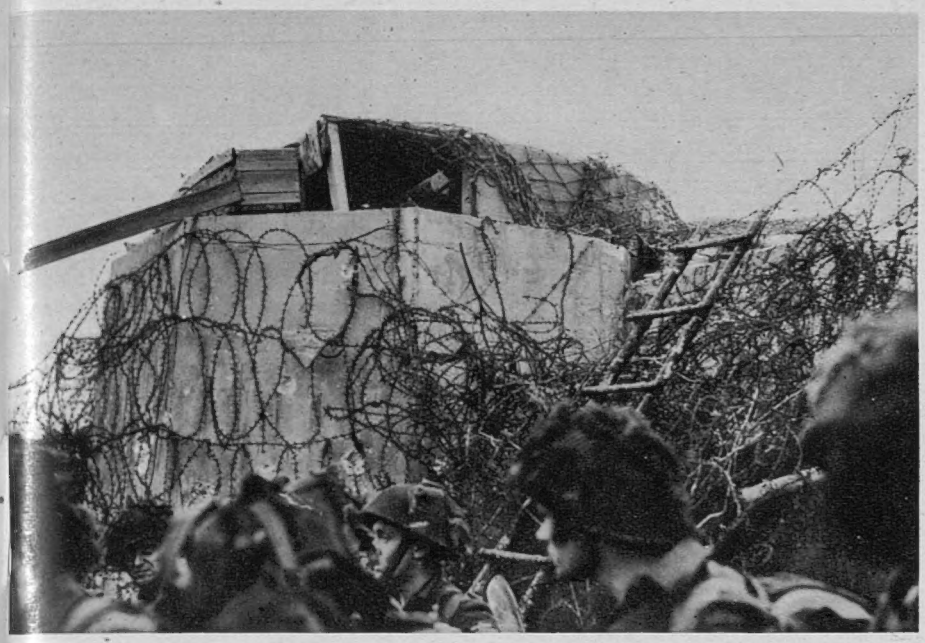
MOVING UP ACROSS THE SANDY BEACH after the first assault parties had pushed on inland over the defences of the "Atlantic Wall." During the first few hours, the sea was very rough, but it calmed down later and allowed great progress to be made



AN ALLIED TRANSPORT BURNS ON THE INVASION COAST AS THE FIRST LANDINGS WERE MADE. The boats went in at high tide over huge iron obstacles, some of which were mined. When the tide receded, some boats were stuck on top of the obstacles and a fair number of mines went off in the water and on the beaches

THE CANADIANS CONSOLIDATE ON THE FRENCH COAST. Here they are seen well established on a beach where little opposition was encountered. When the picture was taken, this Canadian unit was preparing to move inland after having silenced the German machine-gun nests. Battle debris litters the foreshore

CAPTURED NAZIS WAIT AT A STATION ON THE ATLANTIC WALL. This was their defence point : the Germans were captured during the heavy fighting for the locality and are here seen waiting on the platform for their marching orders. Logs and lengths of railway metal in the foreground indicate that the enemy were still preparing their "impenetrable defences" when the blow fell



ONE OF THE "STRONG-POINTS" IN THE ATLANTIC WALL, which was an area of bitter fighting before Canadian troops captured their objective—the German machine-gun nest seen in the background. A scaling-ladder leans on the massive barbed-wire defence to the concrete emplacement. In the foreground are the men who did the job

LINED UP ON THE BEACH. The Canadian picket is guarding a batch of morose Nazis captured during the first hours of invasion : in the background, German casualties are receiving attention from their comrades after the storming of an enemy defence post

IN FRANCE ONCE AGAIN! A scene which will evoke memories of the last war. Canadian troops flank a closely-packed Allied convoy moving inland soon after the first landings

THE FIRST WOUNDED COME HOME : Loading the casualties on to a troop-carrier as the wounded were brought back from the beaches

THE GREAT ARMADA ASSEMBLES: A VIEW OF A PORTION OF THE GREATEST FLEET THE WORLD HAS EVER SEEN—an official picture taken just before zero hour. Warships, transports, landing craft, supply ships, are here seen awaiting the signal to launch the assault. Just by the wingtip of the plane is a large transport crowded with assault troops: within a few hours after this picture was taken, they were actually storming the French beaches. Assault craft which took part in the landing operations stretch as far as the camera-eye can see. Four thousand ships were engaged for the task of invasion, with several thousand smaller craft. All crossed the Channel under the protection of the greatest force of aircraft yet put into the air at one time

GENERAL EISENHOWER, SUPREME COMMANDER, watches the Allied landings from a warship in the English Channel. He cruised for four and a half hours off the beaches

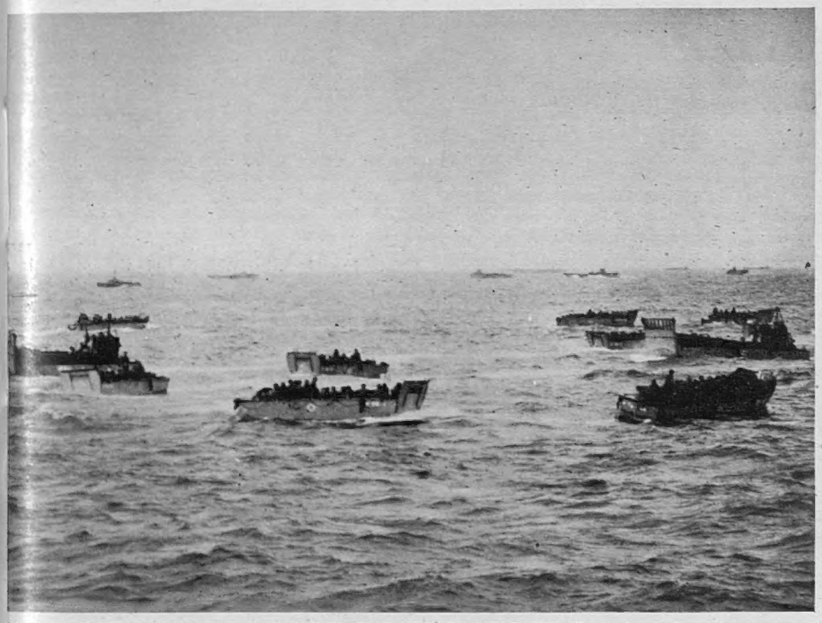
The Invasion of France
(continued)

HOW the GREAT FLEET CROSSED the CHANNEL

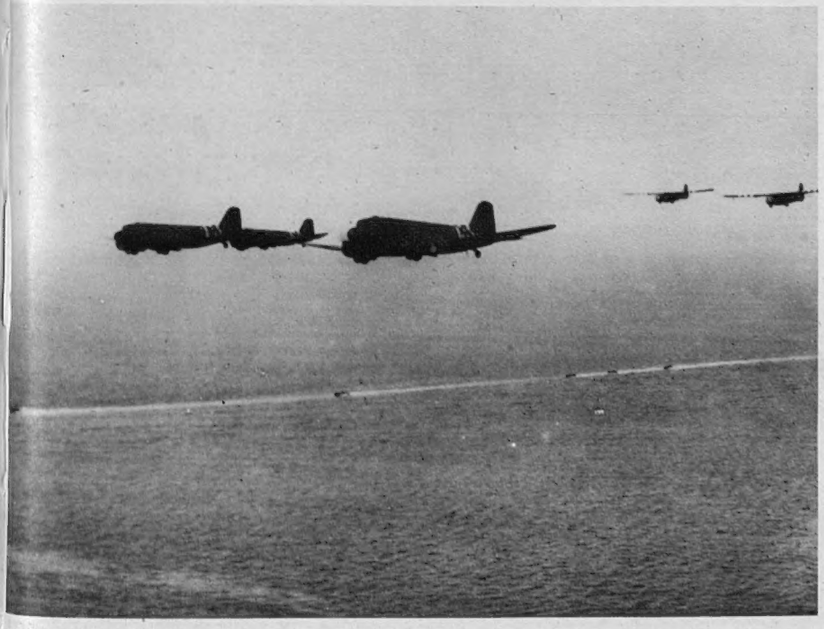
AN AERIAL VIEW OF THE INVASION FLEET ploughing across the Channel in the early hours of the morning of June 6. The invasion coast is barely visible in the background. Thousands of vessels and small craft took part in the great operation

LANDING ON THE BEACHES. This remarkable action-picture shows a stretch of the French coast as the craft went in. Men crowd the sandy shores as landing barges and other assault vessels surge forward for the opening of the powerful offensive. As more landing craft arrive, those already on shore move forward swiftly and surely

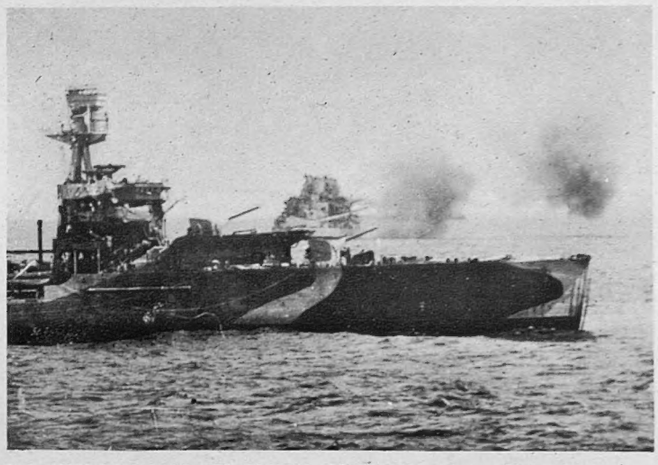
HE NORMANDY COAST COMES IN SIGHT. The scene on the deck of one of the big transports as British troops get their trucks and ambulances ready for disembarkation. All the guns on board are being manned in readiness for eventualities



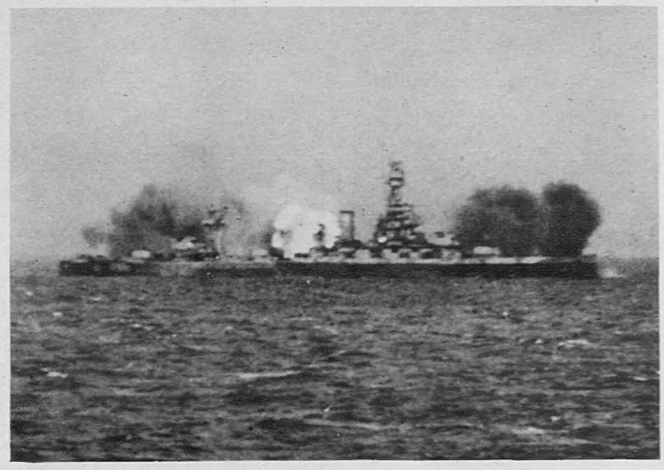
ANDING CRAFT PLOUGHING AHEAD FOR THE FRENCH BEACHES. Each loaded with men and equipment and bucking heavily in the rough seas. The whole Channel was alive with shipping for hundreds of square miles



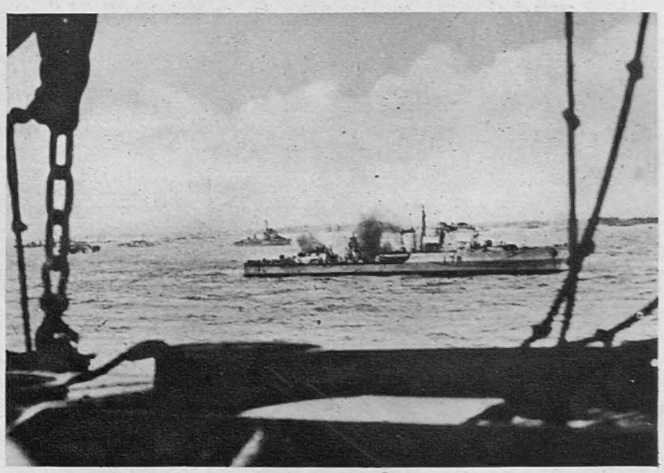
THE AIRBORNE TROOPS ARE FLOWN ACROSS: C-47 troop-carrying planes, towing gliders, are here seen actually on their way to the French coast; down below, naval units are also seen ploughing through the sea towards the northern coast of France



THE NAVY BOMBARDS THE COASTAL BATTERIES. Many of the latter were silenced by the Allied naval forces. H.M.S. "Warspite," veteran British battleship, shown above, took part in this phase



THE U.S. BATTLESHIP "TEXAS" OPENS UP on Hitler's Europe by firing a broadside at the French coast. She wore the flag of Rear-Admiral Carleton F. Bryant, and her fire was directed by aircraft flying over the targets on shore



A BRITISH DESTROYER OF THE HUNT CLASS firing a broadside at the enemy's shore positions as the assault craft went in to land

ADMIRAL VIAN WATCHING THE FIRST WAVE OF LANDING CRAFT GO IN: A scene on the bridge of one of the naval vessels which covered the operation with guns of all calibres

IN THE ASSAULT ON THE GERMAN FIXED DEFENCES, Allied tanks were used as crushing weapons against the dug-outs and pill-boxes of the enemy. Many of the latter were just flattened out, despite the mine-fields laid as protection, and despite the mobile 88-mm. guns and heavy mortars brought up by the Germans to hold up the advance of the massed Allied tanks (See note in box on facing page)—*Drawing by B. C. Wood*

TANKS IN THE ADVANCE TO ROME

The Great Part Played by the Allied Massed Formations; With a Note on some of the British Regiments which Took Part in the Heavy Fighting

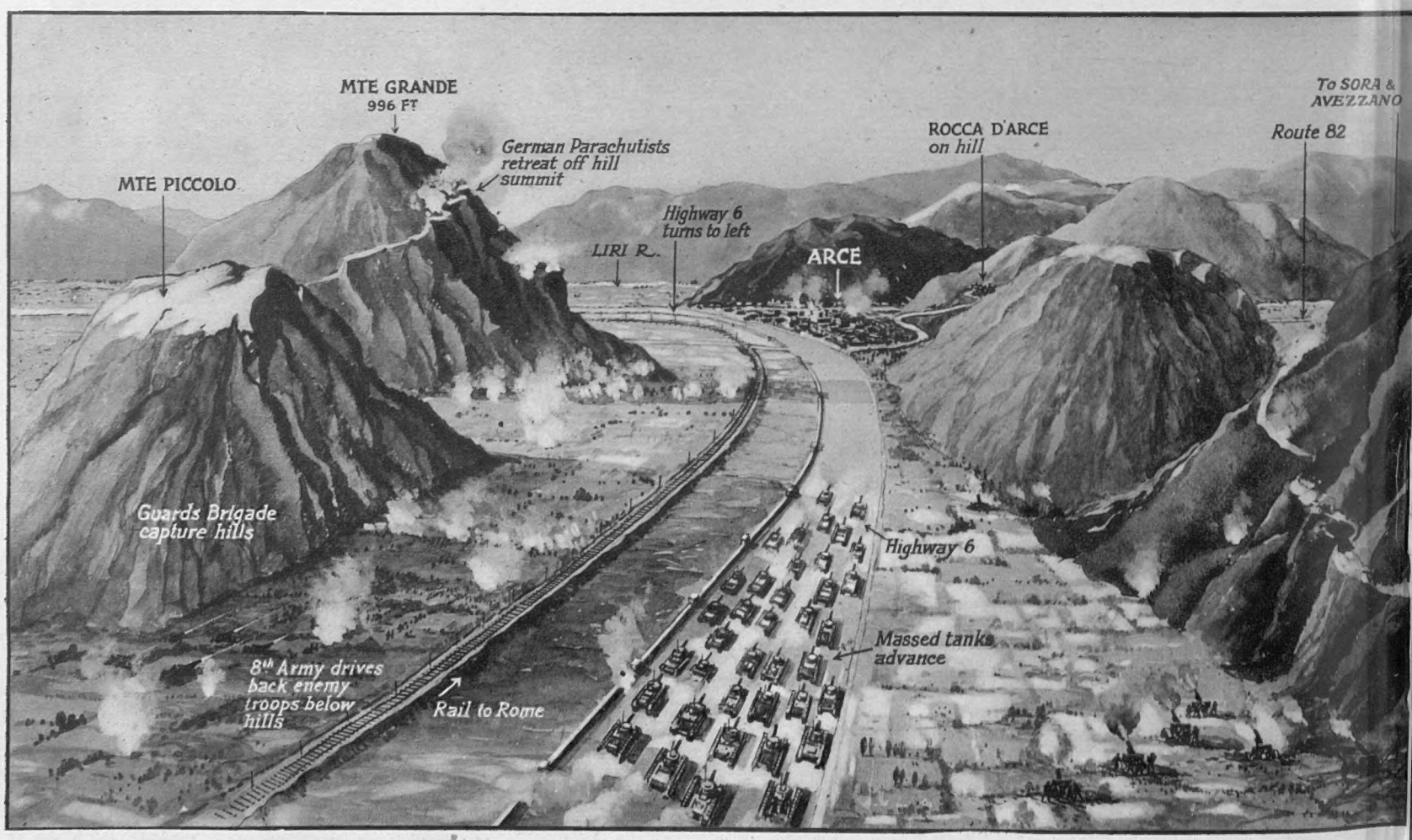
—Illustrated with Special Diagrams and Drawings

Many famous British regiments have been fighting with the Eighth and Fifth Armies in Italy, taking part in the fierce fighting for Cassino, in the crossing of the Rapido against bitter opposition and on the Anzio beach-head. The East Surreys had the honour of being the first to enter Cassino in the final struggle, with the task of clearing out the enemy still hiding in cellars. The Duke of Cornwall's Light Infantry distinguished itself at the crossing of the Rapido.

The oldest and most famous of all the crack regiments—the Guards—were given the work of taking Arce, on Highway Six, just where it bends south to Ceprano. It was a tough job, as the peaks Monte Grande and Monte Piccolo, to the south of the town, were held by the enemy and had to be retaken. The Coldstreams were ordered, on May 27, to climb Monte Piccolo at night, along unknown tracks and without lights, guided only by the luminous compasses of their officers. They reached the razor-backed summit, finding the Germans dropped just below on the other side, while they were exposed on the skyline. There was not enough soil to cut trenches, so they dragged rocks to make a bulwark from the enemy, only some 200 yards away. After a period the Germans managed to creep almost round the Guards, forcing them to retire below the crest, where they had to face a strong attack during the afternoon. Fresh reserves of Guards arrived and the summits of the peaks were gained. The Ayrshire Yeomanry (now an artillery regiment) had taken a great part in the gunnery struggle and were first to enter Arce, which they did not stop to occupy, but drove straight through the town and out on the road, pursuing the enemy.

At the extreme western end of the long line held by the Allies, on the seacoast beyond Anzio, a diversionary attack was made when the main offensive was started. The Green Howards had to cross the Moletta River and gain positions to be held until they were recalled. The country was fairly well wooded and much cut-up by streams and ravines. Ladders had to be used to climb up the river-banks and should have been ready for the Green Howards, but owing to the severe casualties among the sappers, they were not in position. The Green Howards carried some ladders themselves and stormed to the top, forcing their way through the mine-fields, and finally charging the German positions with their famous cry, "Up with the Green Howards!"

Carroceto, the scene of continuous fighting for the past five months, was defended by the Guards in February against the massed strength of the enemy, who launched a tremendous

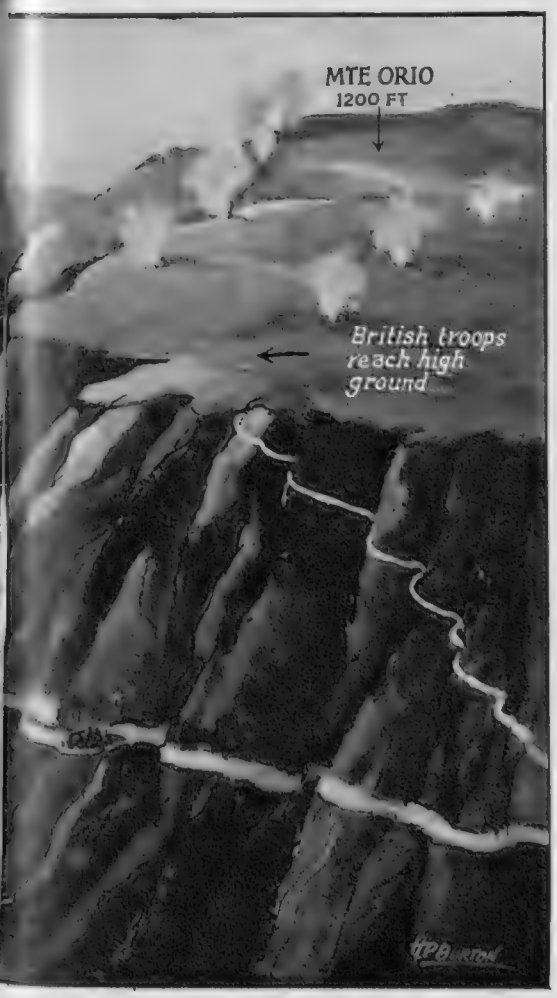


ON HIGHWAY SIX, THE "ROAD TO ROME," WHERE BRITISH LINE REGIMENTS FOUGHT TO CLEAR THE HEIGHTS IN FRONT OF ARCE so that the columns of left Monte Piccolo is indicated: this was captured by the Coldstream Guards. The high ground on Monte Orio, on the other side of the valley, was also met with on both hills, but the keypoint of Arce was soon in our hands (See notes above)—*Drawing by H. P. Burton*

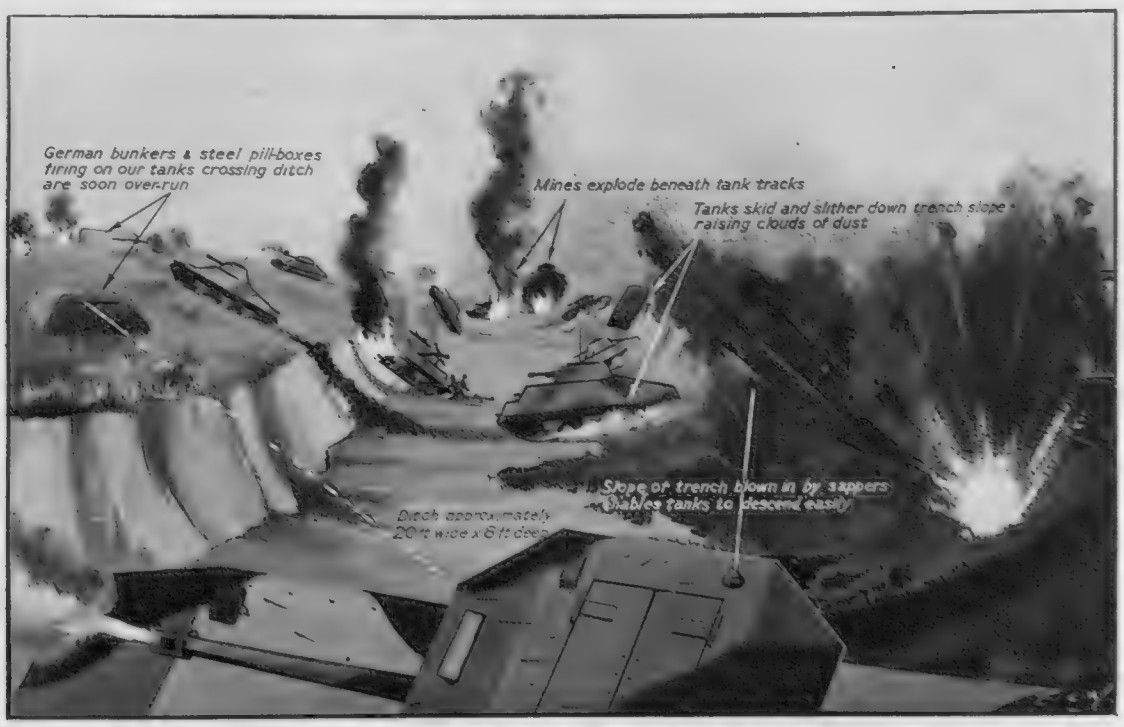
THE MAJOR PART PLAYED BY THE TANK IN THE GREAT FORWARD DRIVE IN ITALY. Massed formations of these monster fighting vehicles streamed across the Liri Plain and forced their way over the Melfa River, driving back the enemy, who did not employ tanks to anything like the same extent. The re-emergence of the tank by the Allies—despite the difficulties of the hilly country in which they fought—was one of the features of the great offensive—*Drawing by E. G. Lambert*

assault. After holding out till our lines could be reorganised behind, the Guards were cut off, and had to fight their way back. After that the enemy strengthened the position, making it into one of the strong-points guarding the way to Rome. On May 27, after a great barrage, masses of tanks and infantry attacked, pressing forward in waves, advancing over a level stretch of open ground. There was little fighting, but the Germans finally cracked and retired. Carroceto fell to the flash of the Sherwood Foresters

It has become increasingly apparent, from a study of the reports, that success in pushing back the enemy and the final capture of Rome was due, in large measure, to the use of tanks. The Liri Valley presented a wider area than any which had occurred during the advance from Naples. But, although wide, it was not ideal for tank work. It was thinly wooded, there were numerous olive groves limiting the view, there were river and tributary stream gullies cutting into the surface of the plain. These limitations, however, were not allowed to weigh against the fact that there was a certain amount of elbow room for deployment and a number of roads on which tanks could advance. Armour was therefore assembled in great weight, and, whenever the opportunity occurred, it was available to surge forward across rivers and along Highway Six directly a weak spot developed. A certain loss was incurred, but this did not deter the forward thrusts. These occurred both down the centre of the Liri Sacco Valley and along all the firmer roads. Lesser country ways, not always dry, carried what tanks they could, and even the hill roads carried their share. Tanks reached the rock-perched villages in the Aurunci Mountains, to the south, and climbed up seemingly impossible hill-slopes overlooking Arce, while simultaneously Highway Six carried some massed charges of armour in a manner which brought complaints from the enemy commentators! At this time, they stated that the Allies were using 1,000 tanks—which was possibly correct.



massed tanks could go through to the assault. On the captured by other British troops. Stiff resistance was



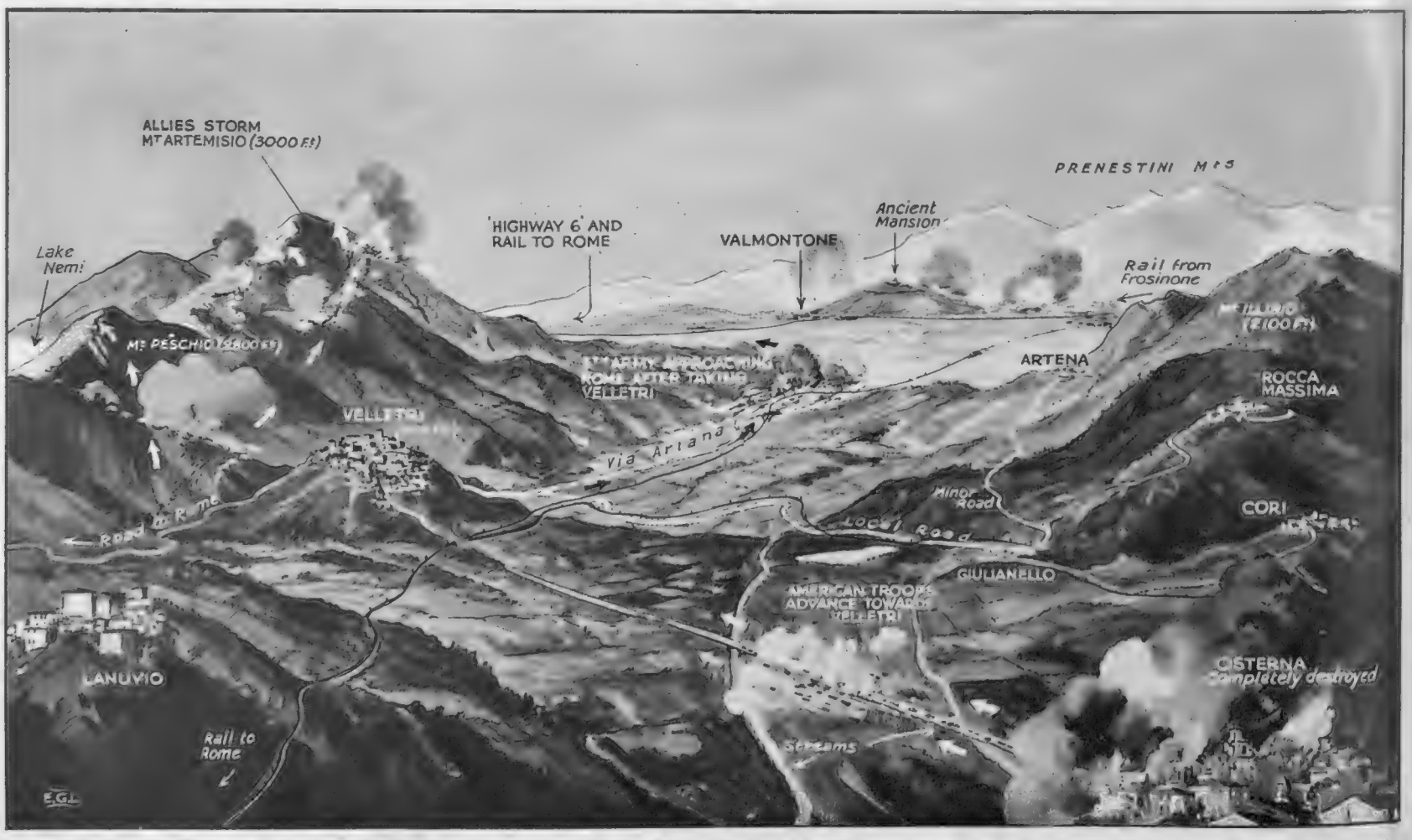
HOW THE ALLIED TANKS OVERCAME THE TANK DITCHES CONSTRUCTED BY THE GERMANS ACROSS THE LIRI VALLEY. These ditches were 20 ft. wide by 8 ft. deep, and mined in addition: they were stormed with the aid of sappers, who blew in the sides so that the tanks could descend easily. On the far side of the ditches the enemy's bunkers and steel pill-boxes were soon overrun by the first tanks to cross and destroyed by gunfire and by the actual weight of the fighting vehicles, which just flattened them out —*Diagram by B. C. Wood*

THE OPERATIONS WHICH LED UP TO THE CAPTURE OF ROME

—Special Sphere Drawings of Scenes on the Fifth and Eighth Army Fronts in Italy

AFTER THE GERMAN RETREAT NORTHWARDS—A SCENE ON THE FAMOUS APPIAN WAY, as farmers of the Pontine Marsh area returned with their families whilst the U.S. troops were still hurrying after the enemy—*Drawing by W. G. Whitaker*

Apparently the Germans did not relish the idea of fighting it out in the marshes and lakes of the Pontine area. They evacuated the coastal area with considerable speed : although bridges were blown and mines sown in places, the telegraph-poles along the roads still stood. Shortly after the departure of the Germans, the Italian farmers came flocking back to their homesteads, even as the Allied columns were streaming along the good, firm roads in the wake of the retreating enemy : children were cycling along the Appian Way to spread the news that the force in the beachhead had linked up with the Fifth Army and that their nightmare under the hated Germans was over —and that life could begin again, in freedom



HOW THE ALLIES CAPTURED VELLETRI AND THE ARTEMISIO HILLSIDES COMMANDING THE TOWN, and broke through to Highway Six, which runs through the valley in the background. Cisterna and Cori were captured in the Fifth Army's first rush forward—*Drawing by E. G. Lambert*

When it was realised that the enemy at last was being forced back from his defence lines in the Liri and Sacco Valleys, a vigorous concerted movement was made from the northern perimeter of the Anzio beachhead. First Cisterna had to be taken—a by no means easy task, for the area had been heavily mined and there were many difficult gullies to be rushed. There were wide stretches of wooded "macchia" country around the town ; this was penetrated in the fine fury of the first outward rushes and troops swept across the intervening plain and up the steep hill-roads leading to rock-perched Cori. Pushing along the lower road at the foot of the Volscian Hills, Artena was captured. At this point forces were well through the gap. On the left flank the hill positions of Lanuvio and Velletri had to be stormed. The enemy had rushed everything he had to these points to stem the advance of the U.S. troops, and the resultant fighting was fierce and prolonged. Velletri is perched high over the surrounding Campagna. Every approach, it would seem, must be under view from above. Troops, however, managed at vital stages to penetrate unobserved close to their targets. They hugged the fortress walls until the moment came for a forward assault. Towering above were the wooded slopes of Mnte. Albano—named Artemisio here, but the various hills and peaks are all part of the circular mass of the long-extinct volcano. Road and railway here skirt the lower slopes on their way to Cori and Valmontone in the "Road to Rome" valley up which the enemy had been retreating. There lay the final target of the U.S. forces

AFTER THE CANADIANS HAD BROKEN THE HITLER LINE ON THE MELFA RIVER: THE MEN HAD FORMED A BRIDGEHEAD IN THE MIDDLE OF THEIR SECTOR AND WERE THEN HELD UP IN A WHEATFIELD ALL DAY, UNABLE TO ADVANCE FURTHER UNTIL TANK SUPPORT ARRIVED—*Drawing by Edward Osmond*

Four companies of Canadian Infantrymen had attacked the main Adolf Hitler Line with recklessness and formed a bridgehead in the middle of their sector. The Germans held their fire until the Canadians were less than 100 yards away. The troops advanced steadily across acres of wheat, and then the Nazis opened up over open sights: men dropped dead all round. They found themselves stuck in the wheatfield, pinned to the ground. They dared not raise their heads above the tall wheat and they stayed like it for twenty hours. They lay in the furrows of the field all day and all night, with the Germans throwing mortar bombs at them, twenty-four at a time. Their tanks had been held up by an anti-tank trap, and they just had to stay until they could be got across the ditch to give them urgent support. When their battalion commander rallied his men and urged them to attack afresh, they did so fearlessly, recklessly

THE EIGHTH ARMY SURGES THROUGH THE LIRI VALLEY IN, APPARENTLY, ENDLESS AND IRRESISTIBLE COLUMNS. All the roads seemed to have become choked with vehicles of every description: where bad patches of road caused blocks, sappers were soon at work making temporary repairs with logs—*Drawing by W. G. Whitaker*

It is not easy for the layman to envisage the enormous amount of varied transport which pours forward when a successful break has been made in a fortified line. The volume of traffic on every available roadway and lane is such that it draws comment from every correspondent who witnesses it. Tanks, armoured cars and Bren carriers are mixed up with guns of all kinds. These fighting units are followed by all kinds of supply wagons, medical equipment and, of course, at intervals there appear the staff car and the correspondents. All of them move forward quickly, and there is a general impression of irresistibility about the scene. As the enemy re-forms within second or third lines, resistance stiffens, and bad stretches of road are reached. Halts occur at an ever-increasing rate. Sappers endeavour to plug holes in the road with makeshift means. Hundreds of logs are expended in this work. Some sort of going is obtained: then a halt must be called and the spot repaired again with more logs, bridges must be erected over yawning craters, and meanwhile troublesome diversions have to be negotiated by the traffic

THE PROBLEM STATED: A STRIP OF COASTLINE 120 MILES IN LENGTH, SHOWING OUR INVASION FORCES HAD TO OVERCOME DURING THEIR LANDINGS IN NORTHERN the German defence lines, we have taken the sector from Abbeville to Le Havre fortification which stretch far into the interior

INVASION—THE NATURE OF THE TASK

—A Special "Sphere" Section

Drawings and Diagrams to Illustrate the Magnitude of the Operations now being Carried Out on the French Coast

This drawing was given in last week's issue of THE SPHERE: it is reproduced here again because it typifies the nature of the problem with which our troops were confronted in their descent on the French coast on June 6. The first line of defence consisted of the extensive minefields along the coast, and the E-boats which were immediately summoned to the attack upon the vast array of Allied shipping. Next came the concrete wall along the coast, with its great guns, and barbed wire entanglements—a fearsome obstacle, but which was unable to hold off the tremendous attacking force of the Allies. Its main object was, in fact, to delay our advance, and thus give time for the huge mobile reserve force, stationed in different areas, to rush its armoured and motorised troops to the invasion points.

BEFORE THE GREAT INVASION ARMADA COULD APPROACH THE FRENCH COAST, the minesweepers had to go ahead to clear the thickly-laid minefields. After the first landings, this work would be continued in whatever area it was thought that other mines were being laid—by ship, submarine or aircraft—*Drawing by Wm. McDowell*

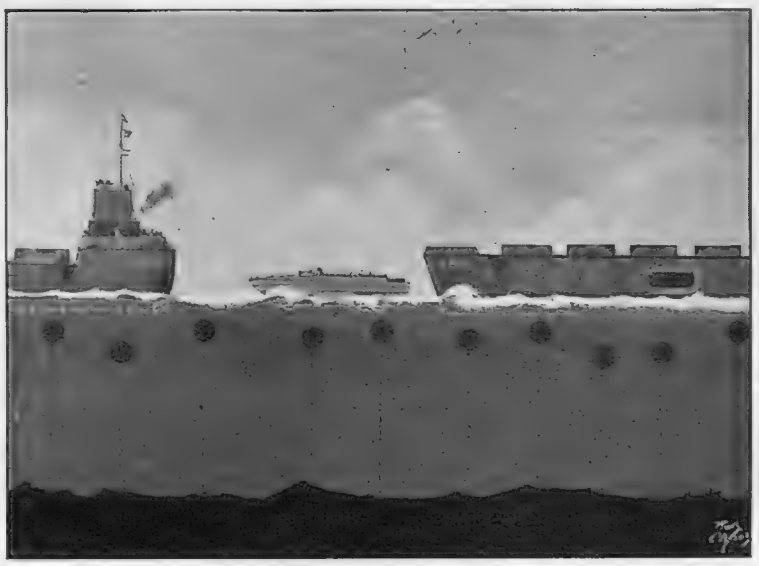
The minesweepers are frequently harassed by enemy aircraft, anxious to prevent this very necessary operation. In the drawing the sweepers are performing their hazardous task, escorted by a sloop: all the vessels have opened up anti-aircraft fire against the German bombers. From the sweeper in the foreground the Oropesa float is being hoisted out: this is a torpedo-shaped object which keeps the sweep wire out on the ship's quarter. The balls hoisted at the mast show that sweeping is actually in progress

HE NATURE OF THE OBSTACLES WHICH RANCE. For the purposes of demonstrating nd indicated the types of obstacle and *–Drawing by E. G. Lambert*

Inner lines of defence are prepared further inland, all of which have been planned to be fought in depth, not on a definite fortified line

Every place along the coast has been made as strong as possible. Great forts, protected by extensive stretches of wire entanglement, and surrounded by machine-guns and anti-tank guns, stand at strategic positions along the area of wall

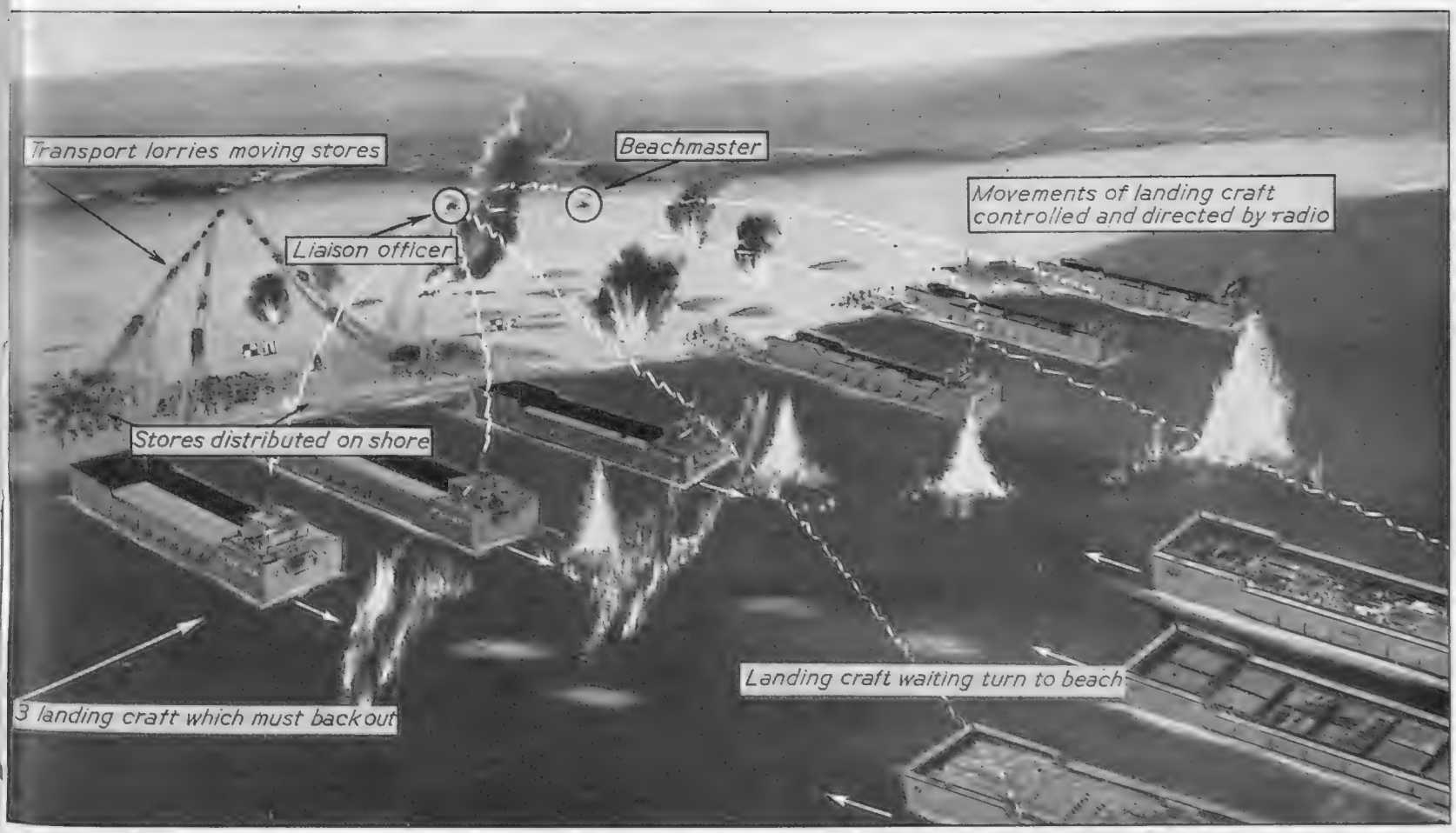
THE ROYAL MARINES GO INTO THE BEACHES AMONGST THE VERY FIRST OF THE INVADERS: In "Support Landing Craft"—vessels which carry personnel only, and which may be carried on the deck of a transport ship—*Drawing by Wm. McDowell*



SHALLOW-DRAUGHT LANDING CRAFT going in to the beaches over the mines laid along the probable landing-points—*Drawing by B. C. Wood*

Before the Invasion, the output of these craft from both British and American yards rose steadily, and thousands of young seamen forming their crews were trained. The shape and design of many of these craft gave navigational problems calling for specialised training, while the exposed conditions under which the crews worked and the necessarily confined living-space aboard called for all the endurance of which these enthusiastic young officers and men were capable. In this drawing the vessels are seen putting in on a lonely stretch of sandy coast in the early dawn, while the Marines, armed with tommy-guns, creep silently up the beach to their objective. Note the "grab lines" on the vessels' sides, which are intended to provide emergency holds for men in the water: note also the armoured control station with its loopholes

On left—The first danger to be encountered in a great amphibious operation are the mines spread along the enemy coast. Minesweepers clear the way for the larger transports and supply vessels, but some of the assault landing craft are of such shallow draught that they can glide in with little risk of hitting the mines. These blunt-nosed, ungainly craft bear the first brunt of the battle on the beaches



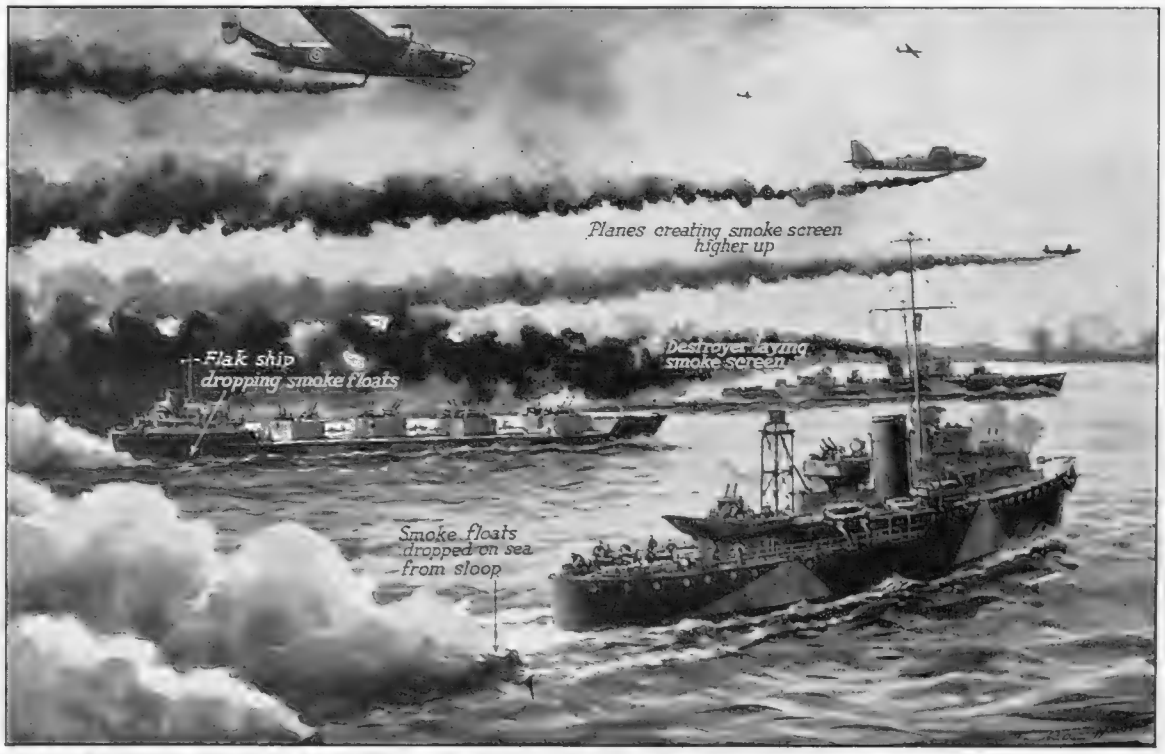
LANDING OPERATIONS ON THE BEACHES: How the "Beachmaster" controls the movements, in and out, of the invasion craft crowding inshore to unload, and how he ensures a quick "turn-round" of the vessels under his orders—*Drawing by B. C. Wood*

The quickest and smoothest possible turn-round of vessels is necessary, not because there is a shortage of them, but because a congestion, even of a wrecked landing craft on a beachhead, may hold up others coming in to land supplies and thereby produce an immediate shortage in a vital piece of equipment at the front. Therefore, in the first few days of invasion, the work of the Beachmaster is vital. This drawing shows how his task of control is carried out from the shore: with the aid of wireless, he directs the newcomers in to a given point and assists the unladen ships to back out as quickly as possible for the return journey to base

INVASION—*The Nature of the Task (continued)*

The FIRST PHASE, CARRIED OUT by the NAVY

The Great Invasion Armadas are Convoyed Across the Channel Escorted by Naval Vessels of all Types. —*Special Sphere Drawings and Diagrams*



SMOKE-SCREENS PLAYED A PART IN THE ACTUAL LANDING OPERATIONS IN FRANCE. They were laid by the troops on shore, and by the warships and aircraft supporting the landings—*Drawing by Wm. McDowell*

In the foreground, a sloop is throwing smoke-floats overboard. These emit dense smoke which lies close to the sea surface. In the background, an Allied "flak ship" (a special landing craft heavily armed with anti-aircraft guns) is doing the same; and, to the right of the drawing, a destroyer lays smoke from her funnel. In the air, a fleet of bombers, covered by fighters, is emitting a smoke-screen at high speed. The sloop is firing smoke-shells at selected gun positions on the enemy coast. It can easily be seen that, by such methods and co-operation, a dense, deep screen can be laid rapidly while vital invasion operations are carried out

THE NAVY'S PART IN GUARDING THE BIG LANDING CRAFT DURING THE INVASION BY SEA. A diagrammatic representation of the scene in mid-Channel at dawn as sloops, destroyers and corvettes of the Allied Fleets escorted the invasion vessels, crammed with men and material, on their way to the beaches—*Drawing by Montague Dawson*

Not only did the Navy guard the armadas across the more open waters, but special vessels, from destroyers to the smallest escort crafts, also watched the landing operations from close quarters. As one correspondent put it: "Of course, we do not go in unsupported, and in addition to the fighting ships of the Royal Navy the invasion armada has its own specialised support weapons. The range of these is considerable, and not all are off the secret list" The destroyers are, as always, "ubiquitous," and their aid may be called for in numerous ways. It will be remembered that at Salerno they closed in at once when the enemy counter-attacked and protected the landing operations by shelling the land batteries at point-blank range. Here Mr. Dawson shows a Hunt class destroyer guarding an array of landing craft, followed by escort vessels of a smaller type. One of the Hunts was described, during the first moments of invasion, as having a duel with a German battery on land, whilst "little destroyers were streaming up and down close inshore protecting the landing troops and plugging shore batteries with shells"

HOW THE FLEET EXERCISED FOR THE INVASION before the actual operation was carried out on June 6. Landing craft are here seen on their way to the "rehearsal" beaches during a recent Exercise. Each vessel carries its own barrage balloon to prevent dive-bombing by enemy aircraft

***On left*—PATTERN FOR INVASION: A drawing which shows, in pictorial-diagram form, the general disposition of a great Allied invasion armada**—*Drawing by Wm. McDowell*

For the sake of clarity, artist's licence has been taken respecting the intervals between the various main lines of ships The various formations are as follows:

A—Minesweepers preceding the landing craft to sweep the inshore waters clear of enemy mines.

B—The first line, or wave, of invasion craft. Troop-carrying barges, small tank-landing craft. These would also carry signal equipment, shore mine-detection apparatus and special assault weapons; to gain a footing on the shore.

C—Larger landing craft, carrying more troops, heavy tanks, heavy artillery, spare ammunition, petrol, oil and water and other stores.

D—Large landing and supply craft, carrying more heavy tanks, guns and supply and repair vehicles and stores. (These lines would be accompanied by numerous flak landing craft armed with A.-A. guns to repel dive-bombers.)

E—Naval escort vessels, to deal with submarines and enemy bomber aircraft.

F—Big ships of the Fleet: capital ships and cruisers, to cover the landing by bombardment, aircraft-carriers with fighter planes to engage enemy bombers; transports with more troops to tranship to landing craft, hospital and supply ships.

G—Bombers engaged in the reduction of enemy positions and fighter cover to protect the bombers.

THE TROOPS GO ABOARD THE INVASION VESSELS: Members of an American Combat Engineer Unit passing through the lowered flap of a Tank Landing Ship (L.S.T.) at an English port just before zero hour

HOW THE BIG SHIPS CARRY THE SMALLER SHIPS: The vessels hanging from the davits are the craft which will actually go up on shore laden with troops. On the cross-Channel journey they travel in this fashion

A NEW TYPE OF FERRY REVEALED BY THE INVASION: This is a "Rhino," a ferry which transports vehicles from the big landing ships anchored off the beach to the actual spot at which they are to touch down on the enemy's coast. It is one of the new and specialised vessels which were designed for the Invasion of the Continent

INVASION—*The Nature of the Task (continued)*

The LANDING on the ENEMY SHORE

The Great Landing Craft Disgorge Their Men and Equipment

Tank landing craft have grown in size during this war, until the biggest of them are very large vessels indeed compared with the prototypes from which they sprang. Starting with vessels which can carry but a tank or two they range up to big craft with cavernous mouths which can discharge a procession of men, tanks, vehicles and guns. As their size has grown, so has the problem of getting their

THE INVASION BEGINS: THE GREAT DOORS SWING OPEN AND THE INVADING ARMY STEPS FORTH ON TO THE SPECIAL PONTOONS LEADING TO THE BEACHES. For the heavier material, such as tanks and big guns, pontcons draw up to the bows of the big ships, whilst anti-aircraft guns mounted on the decks hold off the enemy bombers—*Drawing by W. G. Whitaker*

precious cargoes ashore Under certain conditions transference to smaller vessels is rendered necessary; but this is a task which no transport officer welcomes—especially if the sea offshore is rough A landing pier is the best method of discharging the goods aboard quickly: it will be recalled that this was successfully put to the test at the Anzio-Nettuno landings. Steel-built piers were used on the Italian beaches These can be towed to the desired positions and, once they are anchored to the shore, the work of running the armoured vehicles out of the dark recesses of the Tank Carriers can be set in motion. The hinged platforms forming the bows of the landing ships are lowered: and, as the scores of drawbridges clang downwards, the work can then proceed without the delay of transference to smaller craft. Speed in this operation is essential. The Allied ships and equipment which took part in the landings on the coast of France were all designed with this chief object well in view. In order that they can deal effectively with hostile aircraft attempting to interfere with the landing operations, the landing ships are armed with powerful anti-aircraft weapons

TWO EMBARKATION PICTURES: *On left*—A heavy truck pulls a field kitchen up the bow ramp of a Tank Landing Ship. *On right*—An American amphibious "Duck" enters the cavernous hold for the journey to France

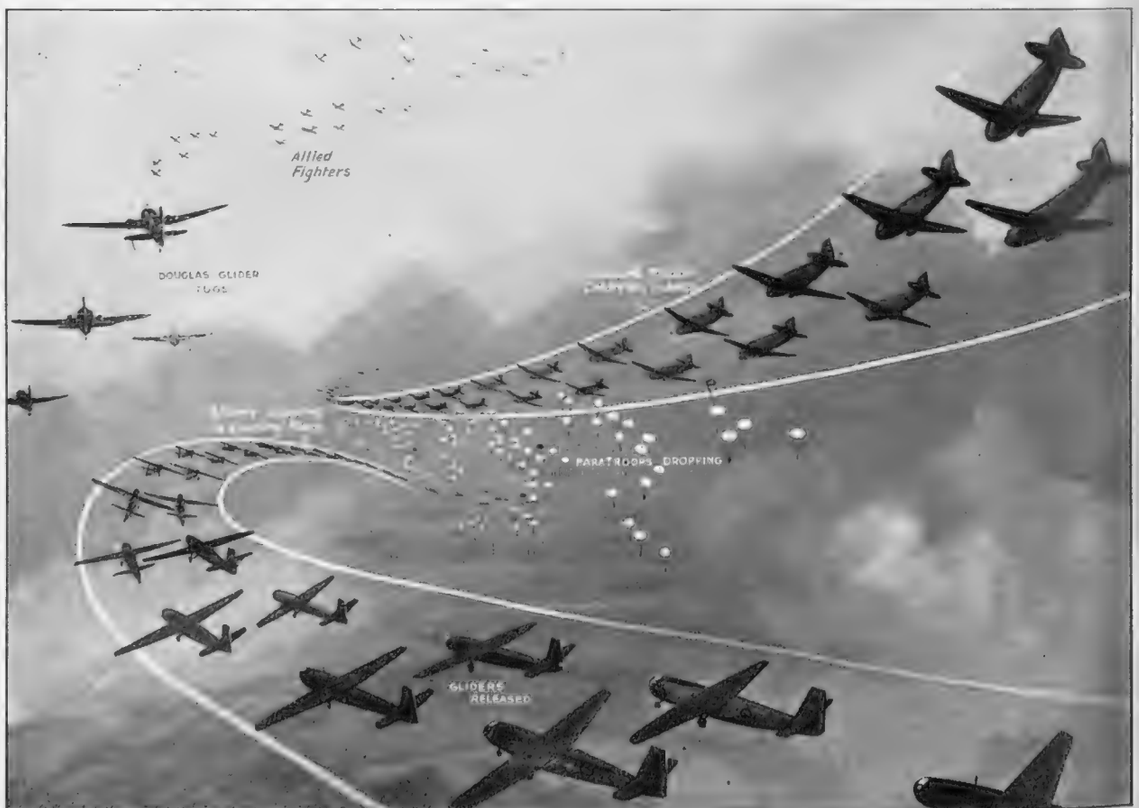
THE AID OF THE AIR FLEETS IN THE GREAT ASSAULT ON GERMANY'S "FORTRESS": The types of aircraft which will probably be used during daylight in the present "Second Front" operations in France—*Drawing by Roland Davies* (See notes below)

INVASION—*The Nature of the Task (continued)*

The PART PLAYED by the AIR ARM

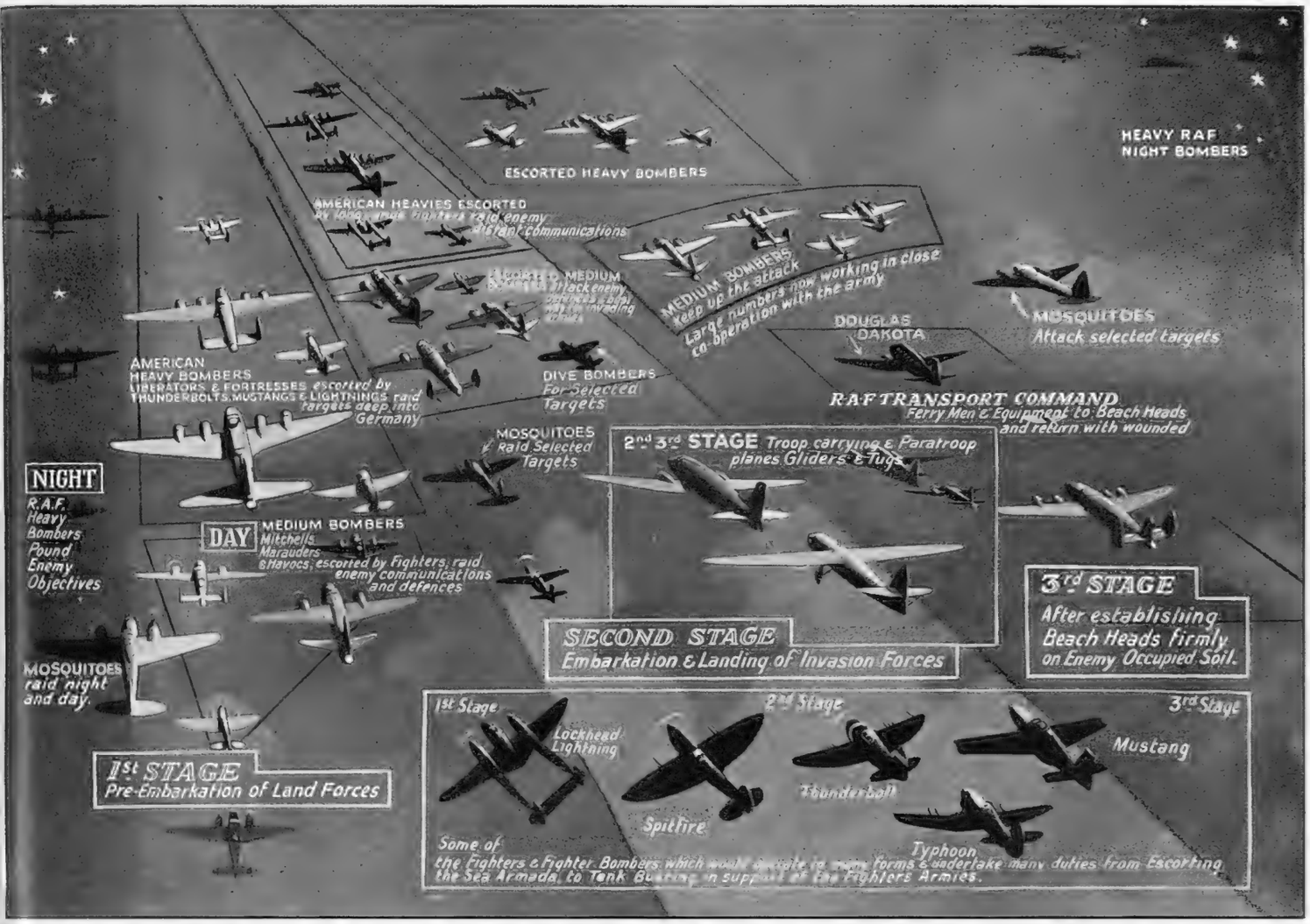
And How the Allied Aircraft will Continue to Operate over the Beaches

A mass assault, such as the one which broke upon the German "fortress" on Tuesday, June 6, entailed the co-operation of the Air Arm to the fullest extent—and especially in the daylight hours. The call was for close support around the fighting troops. Targets were close at hand and had to be dealt with promptly while the battle was actually raging. This meant that the fighters and fighter-bomber type were brought into play in daylight assaults. The Lancasters, Stirlings and Halifax bombers would, in all probability, be operating at night outside the immediate battle area, strafing vital communication points to hamper enemy supplies in movement. In the above drawing, a number of daylight, twin-engined bomber types are shown, together with single-engined fighters which would be engaged in beating off enemy planes. The twin-engined bombers include the Mosquito, the Douglas-Boston, the Mitchell and the Marauder. The fighter types likely to be conspicuous over the battle area are the Mustang, the Lightning, the clipped-wing Spitfire, the Typhoon and Thunderbolt, and, probably, some U.S. built dive-bombers. Douglas transport machines may further figure in the battle sky, and probably the heavily armed Fortress and Liberator bombers may crash their loads on specified targets. There may be much heavy concrete all along the so-called "Atlantic Wall" and just behind it to be smashed, as well as troop and tank concentrations behind the battle line.



THE AIRBORNE ATTACK ON THE LAND DEFENCES AND BEHIND THE ENEMY'S LINES—by airborne troops and by parachutists, under a fighter "umbrella," indicated in diagram form—*Drawing by Roland Davies*

Airborne troops played a notable part in the first operations against the German defence area. They went mainly to the Havre-Cherbourg region. German reports said that the landings had been made in great depth and that "at least four Anglo-American parachute and airborne divisions were taking part." Not only were gliders carrying their groups of fighting men: carrier planes were also dropping clouds of paratroops in some areas in unheard of numbers. The Prime Minister referred to the strength of this particular part of the Invasion Force when speaking in the House on the evening of the Invasion Day. Men with darkened faces, loaded with special equipment and each carrying his collapsible rubber dinghy, stepped into big planes. Their task was to dash towards their targets and to make themselves a profound nuisance to the enemy and hamper his concentrations on coastal defence. In the above drawing, a diagrammatic view of these "airborne" activities is given—the glider types being shown on the left, and paratroops on the right.



HOW THE VAST NUMBERS OF AIRCRAFT OF ALL TYPES POSSESSED BY THE ALLIES WERE USED, AND ARE BEING USED. This diagram also shows the three stages in which the Air Arm engaged during, and just after, the establishment of the beachheads in Northern France—*Drawing by Roland Davies*

The varied types of machines available to the Allies have certain capacities which obviously fit them for special tasks during a large-scale invasion. A diagrammatic view of these possible stages is shown in the drawing above. The progress of the air co-operation is shown in three bands extending across the view, starting with the initial stage on the left. Flying Fortresses and Liberators, escorted by fighters, will wreck targets over a great area. At night the R.A.F. will follow up with their heavy bombers. Medium bombers—such as Mitchells and Marauders—will probably co-operate with the landing forces, clearing a path for their mechanised arms. Rocket-firing fighters and fighter-bombers will turn their attention to tank-busting and gun destroying; while fighters will shoot up enemy troops. Douglas Dakotas will drop paratroops behind the enemy lines and tow gliders, which will swoop down in vast numbers. Airborne troops will also be carried by Dakotas and other planes. The new Avro York will most likely operate. On the return flight, the transport planes will bring the wounded back. Army co-operation Mustangs will spot for the guns and carry out other duties for which their pilots have been especially trained

HOW THE AIRBORNE TROOPS PREPARED FOR INVASION. Men who were to be dropped from the sky into France make last-minute preparations in the early morning of June 6

THE "SOFTENING UP" OF THE ENEMY'S POSITIONS. As invasion drew near, planes and still more planes pounded—day after day—at Hitler's not-so-impregnable "Fortress" all along the coast of Northern France. These are B-26 Marauders of the Ninth Air Force on one of their many two-a-day visits to the French coast

ON THE WAY ACROSS TO FRANCE: In the aircraft, paratroops (with blackened faces and camouflaged helmets) take their ease. Note the sergeant with Red Cross brassard on the left

INVASION—*The Nature of the Task (continued)*

JUST BEFORE the BALLOON went UP

Last-minute Preparations before the Troops Set Out for France

HOW WE LEARNT WHAT THE GERMANS HAD IN STORE FOR US IN FRANCE: A reconnaissance picture showing men on one of the beaches erecting invasion obstacles. The two low-level air photographs reproduced here show parts of the French Channel coast where the Allied landings have since been made. Thousands of these photographs have now been secured by the R.A.F.: they are part of the intensive air preparation carried out for the liberation of Europe

BARRIERS AGAINST LANDING CRAFT ON A FLAT FRENCH BEACH. A picture taken by a very low-flying aircraft. The men running out of the picture are obviously afraid of the plane's bombs and machine-guns

A PRE-INVASION SCENE IN ENGLAND: Thousands of American-built "Ducks" (the amphibious vehicles which swim by sea and drive over land) parked on the hard sands around the coast awaiting the order which sent them filing on to the decks and into the holds of landing craft. This type of vehicle played an important part in the invasion of Europe

BALLOONS BEING PREPARED FOR THE CHANNEL CROSSING. These naval-type barrage balloons were flown by each ship which crossed to France. They were inflated within a few yards of the vessels and transferred to them very shortly before zero hour

TANK LANDING CRAFT LOADED WITH MEN AND EQUIPMENT AT A BRITISH EMBARKATION PORT. The decks were packed solid with vehicles and fighting material: each lorry was backed on to the ships, so that they could disembark the quicker. These medium-sized vessels crossed over to the French beaches under their own power

HOW THE NAVY BRIEFED THE COMMANDERS. A picture taken just before the operation began. Before being admitted to the Conference hall, every officer's identity was checked on arrival. After the briefing, they went back to their ships, to stand by for sailing orders

BUSY ENGLAND—IN THE DAYS JUST BEFORE THE INVASION: Both sides of the road in an English town are lined with vehicles to which last-minute adjustments are being made. Within ten minutes the whole column was ready to be on the move. Nissen huts built in the car-park of a nearby cinema served as mess-rooms for the troops

PREPARING THE AIRCRAFT FOR THE AIRBORNE INVASION. These Stirlings were used to drop parachute troops over France in the early hours of June 6. They represented only a fraction of the great number of planes employed for the invasion. Here they are lined up on both sides of the runway ready for loading

AMERICAN ARMY VEHICLES PARKED ALONG THE HIGHWAY IN A SUBURBAN VILLAGE. Hidden under camouflage netting, it would have been difficult for German "spy planes" to detect their presence. Each vehicle was in good condition and ready for instant action. This scene was duplicated at many points around the English coast

BRITAIN'S SECOND-FRONT ROADS ARE WIDENED: A military sign near a spot where this work was being carried out

ROAD-WIDENING IN PROGRESS OVER A CULVERT. Trees obstructing the work are ripped out bodily to provide more space

A NARROW, WINDING ROAD NEAR A CAMP is widened and straightened by a Road Construction Unit of the R.E.s

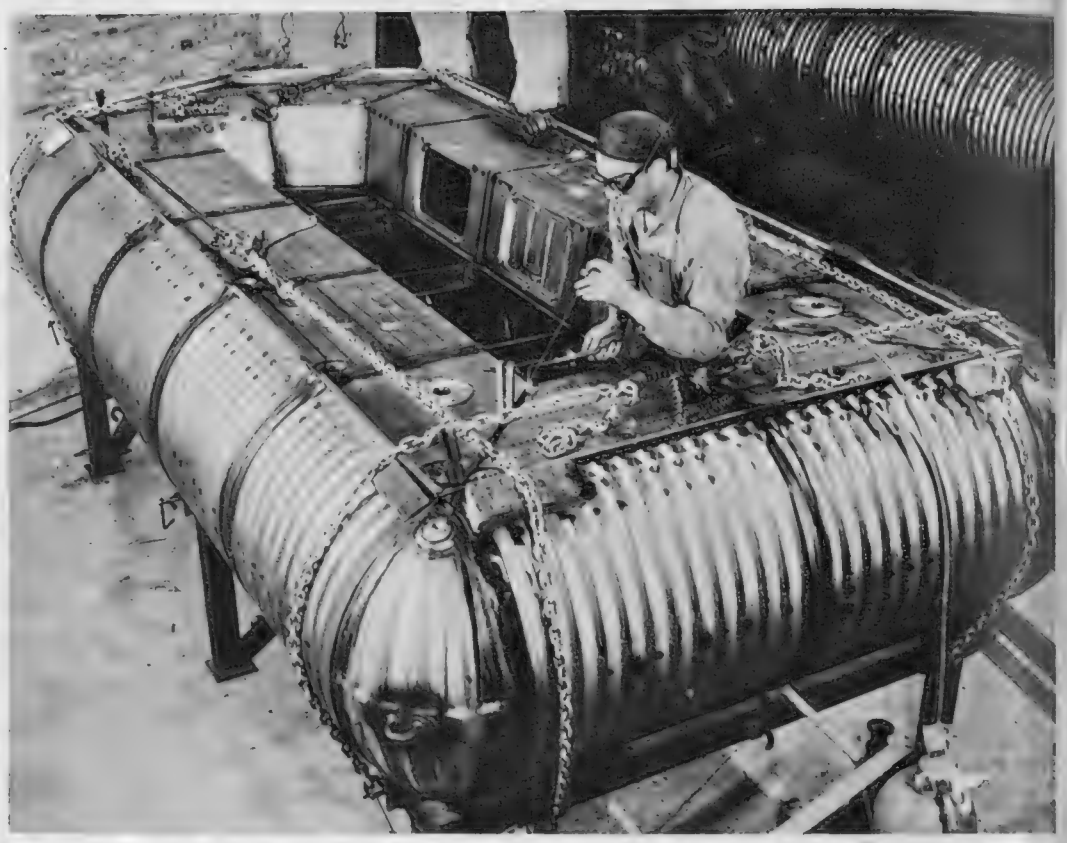
MEN BREAKING DOWN A CONCRETE PILL-BOX and a road-block to widen a road for invasion traffic. The pill-box was erected against a possible enemy invasion. Many roads in many parts of Britain have been extensively widened, and bridges strengthened, in order to carry the extra military traffic which the Second Front has made necessary. The work has been carried out by both civilian and Army personnel. In some cases, narrow and dangerous corners have been straightened; where large trees were an encumbrance, they were torn down. The work was done at high speed with the aid of the most modern equipment

INVENTIONS FOR WAR

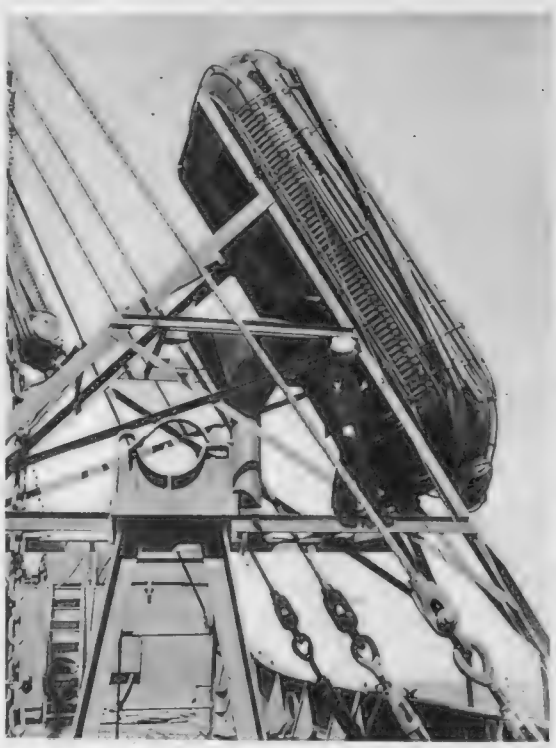
With a Special Note on the German Nebelwerfer, or Multiple-barrelled Mortar-gun

AN UNUSUAL TYPE OF GERMAN MINE-DETECTOR. Much German equipment was captured by British troops at Anzio before the break-through last month, and some of it was actually being used against its former owners. Several unusual-type mine-detectors were secured, including the one depicted here. This piece of equipment is on the "pram" principle: the search coil is ahead of two rubber-treaded wheels; on top is space for a long tank of white paint. The operator wears headphones and carries the amplifier on his back: he receives the reactions back through his handlebars. The white paint pours slowly out of the tank, making a continuous, well-marked lane for the following infantry

FROM BRITAIN TO ANZIO VIA RUSSIA: A tank radio set, captured from the Germans in the beachhead, and now in use in a British tank. It is of British make, was sent to Russia under Lease-Lend, and has Russian figures and instructions on its panels. Captured by the Germans on the Eastern Front, it was used by them until its recapture in Italy



A NEW LIFE-RAFT NOW BEING MADE IN CALIFORNIA, showing a welder at work completing the sections. This new, unsinkable life-raft is made of 16-gauge cold rolled steel: it is 16 ft. 2 ins. long, with an 8-ft. beam, and has a bow to aid sailing or rowing. In the outer shell there are nineteen airtight compartments: the shell is 3 ft. in diameter and has so much buoyancy that the raft sinks only 6½ inches under its maximum load of twenty men. When empty, each raft weighs just over a ton, to which is added more than half a ton of supplies and equipment, ranging from mast, oars and sails to food, blankets, fishing kit and sea anchor, storm oil, Bible and playing-cards. No matter how the raft hits the water, it always floats topside up—for both sides are exactly alike. It is released by a manually-operated trigger, and it also has an automatic device, actuated by water pressure, which launches it if the ship goes down. Each raft is tested by lifting it 45 ft. above the water on a crane: then it is dropped in several different positions—endways, sideways and on its "belly"



HOW THE NEW LIFE-RAFT (SEE UPPER PICTURE) IS INSTALLED on the American Victory ships. They are automatically released if the ship should be sunk at sea

LAYING THE DUST ON FORWARD SUPPLY ROADS: Many of the positions in the forward areas in Italy could only be reached by means of dirt roads which were bulldozed through fields and woods. The passage of military transport resulted in a thick top coating of fine dust, which rose in a cloud, bringing down harassing fire from the enemy. To reduce the dust, improvised water-carts were used daily all over the bridgehead. This "cart" shows the simple, but effective, manner in which the dust-laying operation was carried out

HOW AIRCRAFT IN DANGER ZONES ARE PROTECTED FROM THE EFFECTS OF BLAST. This picture was taken on a landing-strip at an advanced airfield in Italy: it shows a Spitfire being serviced in its special anti-blast bay. The latter rises well above the height of the aircraft, which is thus screened from shell fragments should a bomb from an enemy bombing plane burst near by

THE MORTAR-GUN, WHICH NOW APPEARS TO BE THE ENEMY'S FAVOURITE WEAPON for attacks on infantry in fixed positions. All throughout the prolonged defensive fighting in Italy, and then during our great offensive, the Germans evidently put great faith in the mortar. They have perfected the Nebelwerfer, or multi-barrelled weapon, which is here seen in action against a line of Allied mortar-guns operated singly. The six shells from this Nebelwerfer may arrive all together or they may be dispersed somewhat by the wind—*Drawing by H. P. Burton*

The GERMANS CHOOSE the MORTAR

When our men crept forward in Italy to open their big offensive against the Germans, they carried with them every device for the detection and immobilisation of the enemy's mines. And then found that, in many cases, there were none to detect! Instead, they were subjected to intense mortar-fire from the German defenders firmly ensconced on those awkward hill positions.

Correspondents at the front made constant reference to this weapon. "We have great artillery and air superiority," said one, "but often positions are so close that mortars are the weapons most used." Another spoke of advancing "in the face of the deadly fire of German mortars, the chief enemy weapon in this battle."

All of which is not surprising, for the terrain of the central Italian peninsula is just what the mortar-man likes. On a flat battlefield he is required only for the occasional lobbing of bombs into buildings and excavations; real artillery and dive-bombers look after the main jobs. But in regions like the Liri Valley, where every short flat is succeeded by a wall of rock, where defenders have innumerable boulders and caves for protection, the mortar came into its own.

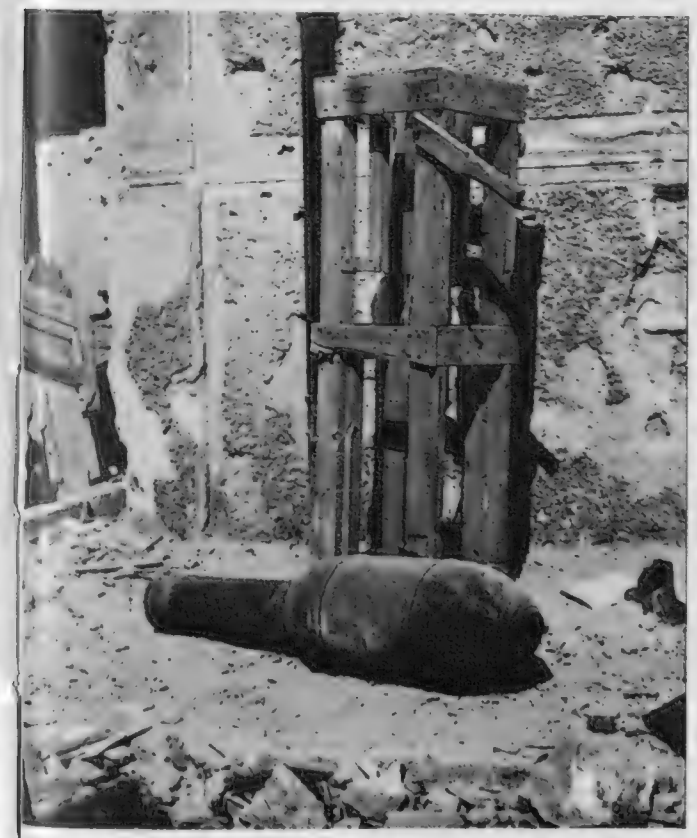
"Heavy mortars should not be employed against targets which can equally well be engaged by flat, trajectory weapons. This procedure is considered to be uneconomical in ammunition." So ran a German Army Order of a few days ago; and it is obvious that the *Wehrmacht* in Italy made lavish use of the mortar mainly because the lie of the land handicapped their field-gunners. When a shell is fired from a gun, it merely plunges into a hillside a 100 yards away. The German Army does not possess many light howitzers or gun-howitzers, like our 25-pounder. Mortars, however (lighter than any gun), could hurl neat little bombs high into the sky, so that they fell most disconcertingly right among dangerous parties behind nearby boulders.

Mines could easily be laid in the desert, but how to sow mountains with them? That was the problem the Germans set out to solve, bearing in mind that the land-mine as such had not worried the British much, so far.

The ordinary German heavy mortar has the following specifications: weight of the piece in action, 187 lb.; two types of H.E. shell, 8·8 lb. and 14·3 lb.; range with light shell, about 4,500 yards; with heavy shell, about 2,500 yards; rate of fire 20 to 25 rounds a minute; smoke-shell is also fired.

But the single-barrelled mortar, though still the maid of all work, was increasingly replaced at vital points by the six-barrelled Nebelwerfer ("beaked-firer"), alias the "Sobbing Sister" or the "Chicago Piano." A close relative of the Russian "Katiusha" and similar weapons in other armies, this pride of the German Secret List makes a noise like a gaggle of geese as its six heavy bombs are *simultaneously* ejected like little rockets by an electrical release, to hiss well over a 1,000 yards and fall with devastating mass effect on the hidden target. According to wind and other conditions, the missiles may arrive in a heap, or spread somewhat, or even singly, but always most unpleasantly. They have an uncanny faculty, these mortar-gunners, for feeling out a target and then concentrating on it, and once the concentration begins the target must either move away quickly or die.

Although this present prominence of the mortar is the result of Italian conditions, we will probably find that the Germans in Western Europe, where our Invasion troops are now engaged, also have plenty of these weapons, an old favourite with a fundamentally gnomish enemy.



SUPER ROCKET-BOMB FIRED FROM A GERMAN NEBELWERFER, as it was found after the evacuation of Cassino by the enemy. The case in which the bomb is carried stands beside it. The disastrous effect of its explosion can well be imagined!

BRITISH MORTAR-MEN PREPARING THE CHARGES FOR MORTAR-SHELLS—a picture taken in the Anzio bridgehead before the big offensive in Italy

AFTER THE CAPTURE OF ROME...

A Study of the Pope, Pius XII—"The Greatest Neutral" and the Head of the Roman Catholic Church

By CHARLES GRAVES

THE fall of Rome, followed so swiftly by the start of the Second Front, makes the position of the Pope more interesting and important than ever. He has been described correctly as "the greatest neutral." It is surprising, however, how little the British public knows about him, and how recent is any knowledge of his personality, even existence. Not a single English newspaper printed a single word about him until December 10, 1929, when, among "Brief Overseas Items," which included the departure of the second Battalion Royal Fusiliers from the Rhine to Colchester, a national daily newspaper announced "Monsignor Pacelli, the Papal Nuncio to Germany, who it is expected will shortly be made a Cardinal, presented his papers of recall to President von Hindenburg yesterday."

Pope Pius XII, as Cardinal Pacelli now is, was born in Ponte, a suburb of Rome near the Tiber. His family surname, translated literally, means "son of peace." His family arms show displayed in the heavens above a rainbow, in the centre a dove with the olive branch, below a triple rock on which stands the dove over a stormy sea. The Latin motto is "The Fruit of Justice is Peace." The large reddish-brown, four-storeyed house, with its courtyard and fountain, where the Pope was born in the Via degli Orsini, is still in existence. This is the Pedicone Palazzo, where, on March 2, 1876, in an apartment on the third floor, the Pope was born, and taken the same day to the local parish church to be baptised by his uncle with the names of Eugenio Maria Giuseppe Giovanni, ultimately becoming the 262nd successor of Saint Peter as Pope of Rome. His father was Dean of the Vatican Bar, having come to Rome from the Provinces and married Virginia Graziosi. There were four children of this marriage. The eldest, Francesco, became a lawyer and had a considerable part in the drafting of the articles of the Lateran Treaty of 1929, which enabled the Papal See and King Victor to agree to be reconciled. In those days, they say, it was unusual for a Catholic child to go to a State school. However, Eugenio was sent to the Visconti Grammar School, reputed to be the best in Rome. Here he proved himself an excellent linguist (to-day he can read and speak eight languages) and also won the Gold Medal for history.

No doubt his father thought that his second son would also become a lawyer. But this hope was not fulfilled. The future Pope expressed a wish to become a priest and entered the Capranica Seminary. After a year, however, his health deteriorated, owing to the harshness of the community life, and it was only his father's influence which enabled him to live at home and continue his studies. His punctuality was extreme, and on only one probably apocryphal occasion did he fail to be on time. This was when the local coachman failed to appear and young Pacelli decided to drive himself. Unfortunately, the horse was used to having a pint of wine at the half-way stop, and the future Pope, bearing this in mind, decided to give the animal two pints, being in a hurry. But the horse, having started off at high speed, suddenly lay down on a hill and fell asleep, with the result that the driver had to walk the rest of the way.

It was in a side-chapel in the Basilica of Santa Maria Maggiore that young Pacelli said his first Mass (Easter 1899), after having been ordained priest the previous day by the Patriarch of Antioch. His desire then was to become a curate. But somehow Monsignor Gasparri, then Secretary of the Congregation for Extraordinary Ecclesiastical Affairs, had already heard about this quiet young man with the legal brain and appointed him a junior clerk, and later a principal copyist in his department. Here he lived for some time on the top floor of the Vatican Palace and soon became the Under-Secretary.

To Englishmen, it is interesting that the first country he visited outside his native Italy was Great Britain. On this occasion he went to London in 1901, bearing a personal letter of condolence from Pope Leo XIII to Edward VII on the death of Queen Victoria. He made a return visit in 1908, when he stayed with the late Duke of Norfolk at St. James's Square during the London Eucharistic Congress. His third visit to London was in 1911 for the coronation of King George V. Here he was most impressed by the Naval Review at Spithead and received the Coronation Medal. He is thus the only Pope with a British decoration.

THE FIRST PORTRAIT OF THE PRESENT POPE: This picture was completed in the year 1940; it was painted by an Italian artist, Roberto Gautezzi, and was the first of two portraits of Pius XII begun just after his enthronement. It was intended to hang in the S. Paolo Church in Rome

THE HISTORIC CENTRE OF ANCIENT ROME: The Forum Romanum, as restored by Professor G. Tognetti

The drawing above shows a restoration of the famous Forum, the central spot of Roman life under the Republic and the Cæsars. Professor G. Tognetti's drawing shows the buildings, columns, arches and statues as they were in Imperial Roman days. Some of the buildings dated from Republican days; others from the time of Julius Cæsar, who did much to embellish and make splendid the central spot of the Roman Imperium. The older Republican buildings were restored and new ones erected. In this view, the spectator is standing with his back to the Capitoline Hall and looking towards the six-columned Temple of the Divine Julius, flanked by the arch of Augustus. On the left is the great Basilica Æmilia, dating from Republican days (179 B.C.). Opposite it, on the right-hand side of the drawing, is the arcaded front of the Basilica Julia, each arch containing a statue. Farther back on the same side is the Temple of Castor. Closing the view in the background can be seen the upper part of the Domus Vestæ. A number of commemorative columns flank the central space of the Forum, and in the middle distance can be seen the famous rostra from which the great ones of Rome addressed the citizens

Despite his diplomatic training, however, his wish to be a mere curate remained unabated, and in his spare time he heard confessions in the small church where he had served Mass as a young priest, gave Sunday-school lessons and occasionally preached sermons.

On the outbreak of the World War, Pope Pius X died of a broken heart, and was succeeded by Benedict XV, who had been the immediate superior of both Gasparri and Pacelli when he was Cardinal. Benedict XV promoted Gasparri to be his Secretary of State, while Pacelli took the latter's place in the Congregation for Extraordinary Ecclesiastical Affairs.

It was in this capacity that the future Pope, now a Monsignor, had his first real contact with war and its consequences. For it was he who was instructed by Pope Benedict to arrange the exchange of prisoners of war unfit for further military service (30,000 were thus cleared through Swiss territory); to return civilians too young or too old for active service (23,000 French and Belgians were released by Germany from the occupied areas); to arrange for the moving of 10,000 wounded soldiers (French, British and German) to Switzerland in December 1915 to recuperate. In addition, prominent prisoners were pardoned, and the Roman Catholic bishops were instructed to collect information on missing persons and prisoners of war, to save the anxiety of their friends and relatives. To do all this, the future Pope trained a special staff and had special offices, where he worked night and day.

Pleased with the success attending his efforts, Pope Benedict decided on a peace movement, and in May 1917 sent the still young Pacelli to Munich as his Papal Nuncio. Technically, he was accredited to the Catholic Kingdom of Bavaria, always the most independent State in the German Reich, and to emphasise the extra importance of the post Pacelli was made titular Archbishop of Sardes and consecrated by the Pope in the Sistine Chapel.

This peace effort failed, and when the war ultimately came to an end revolution broke out in Bavaria. The future Pope stayed in Munich, although the Government fled. A number of armed looters forced their way into his home. He met them on the staircase in his ecclesiastical robes, and said: "What good would it do to shoot me?" This complete fearlessness resulted in their withdrawal.

In 1925 he became Nuncio in Berlin, and according to the late Lord D'Abernon was the best-known diplomat in the capital. Five years later he became Secretary of State to the Vatican, a post which might be described as a combination of Prime Minister and Foreign Secretary. In 1934 he went to Buenos Aires as Papal Legate at the Eucharistic Congress. In 1936 he paid a visit to the United States, where he went to the top of the Empire State Building in New York, saw the Liberty Bell in Philadelphia and visited Cleveland, Chicago, Hollywood and President Roosevelt.

In March 1939 he became Pope, on his sixty-third birthday, faced with the most complicated world situation with which any Pope has had to contend. Since then his speeches, appeals for peace and other public actions have drawn world-wide attention and almost world-wide controversy. Some people say that his attitude towards the invasion of Denmark and Norway was a clear proof of his dislike of Hitler and the Nazi regime. Other people say that he should have been more firm, and that his comment merely expressed pious regret. It is almost impossible for him to be popular in a world where one-half of his followers are fighting against the other half. Personally, I have no intention of being controversial on the subject. This is merely a brief, personal history of the head of the Roman Catholic Church. There is no doubt about his courage. He refused to be scared out of Rome by the threat of air raids, just as he refused to be scared out of Munich by the revolutionaries. When Italy declared war on France and Great Britain, he countermanded Mussolini's orders to the clergymen of Rome to ring the bells in celebration of the fact. He stayed in Rome when the Fifth Army approached the gates and it looked as if Kesselring might make a fight of it. But besides being brave, he is undoubtedly an exceedingly able diplomat.

The fact that goods made of raw materials in short supply owing to war conditions are advertised in this publication should not be taken as an indication that they are necessarily available for export

THE CAMPAIGN IN BURMA:
And Pictures from Other Quarters of the Globe

IN BURMA: British troops stand at the shattered entrance of the Tunnel on the Maungdaw-Buthidaung road, to which the Japs clung tenaciously until evicted after heavy fighting. Heavy rainstorms, heralding the monsoon, have now become a serious hindrance to the operations on the Fourteenth Army front in Burma, although in the Myitkyina region General Stilwell may still find it possible to continue his offensive. The past five months' campaigning have cost the Japanese 25,000 killed and wounded, and fighting on the Kohima ridges and south of Imphal has been described as some of the severest of the war. The Tunnel seen above—in the Mayu Range—figured in the news in April last: it was described in the issue of *The Sphere* for April 22

TROOPS CLIMB WITH THEIR EQUIPMENT THROUGH THE BURMESE HILLS, to reinforce one of the Allied "Boxes" established during the fighting in the neighbourhood of Kohima

THE WAR IN THE MEDITERRANEAN STILL GOES ON: Middle East Beaufighters sinking a large enemy supply vessel in the Aegean Sea. The ship was laden with ammunition: under attack by the Beaufighters, it exploded. The aircraft first attacked two smaller supply ships, but broke off on sighting this larger one. The Beaufighters soon set it on fire, and in a few seconds they saw it blow up. Smoke rose to 3,000 ft., and debris was hurled high in every direction

MARSHAL PETAIN VISITS PARIS AT LAST. The French Chief of State paid his visit to attend "the funeral ceremony for the victims of the last Anglo-American raids." The service took place in the Cathedral of Notre Dame, and here the Marshal is seen being welcomed in front of the building by Cardinal Suchard—on May 12

ASMARA, CAPITAL OF ERITREA: Native mothers bring their children to the British-run clinic for medicine and treatment. One of the sights in the capital of Mussolini's former colony is the daily crowd outside the Children's Welfare Society Centre. Since British troops marched into Asmara, capital of Eritrea, on April 1, 1941, the city has been under British administration. There is no mistaking Asmara for any but an Italian city. Apart from the names over shops, and posters on walls, it has the aspect of all Italian towns—from Genoa to Brindisi, large and small. Under British administration, Italians and British work peacefully and energetically together. The country is practically self-supporting, and the Budget, if not exactly balanced, is in a state bordering on equilibrium

HOW THE TROOPS TOOK OVER THE MONTGOMERY AND WARD PLANT IN CHICAGO: The United States Army took over this building last month to enforce the seizure order issued by President Roosevelt after the head of the firm had refused to recognise the Trades Unions. The forty soldiers seen in the picture are Military Police attached to the 740th Battalion, who carried out the occupation. A few days later they were withdrawn and the plant handed back again to Montgomery and Ward

NEW LAMPS and OLD

A Fortnightly Causerie on Life and Letters

By JOHN GORE

SECOND Thoughts on "Emma"—and a Barchester Ramble.—A spell of bed-keeping—happily rare with me in a lucky life—was sweetened by the choice of two old bedside favourites, *Emma* and *Dr. Thorne*.

I read both very carefully and came to the conclusion that I had underrated both and must promote them forthwith!

Emma, first. I crossed swords not long ago with those two confident ladies who wrote that stimulating book, *Talking of Jane Austen*. I was grateful to them for the book, but I felt reluctant to bow to all the counts of their verdicts. They lashed at the feather-brained herd who declare: "P. and P. first and the rest nowhere." That is very right. There are "M.P." and *Emma*, and, come to that, "N.A." and "P," and even "S. and S." (*They* have hoisted "S. and S."). But my re-reading (fifth time) of *Emma* convinces me of error. I pitched her too low. The ladies are right. She must be, at the least, considered in the same breath with "P. and P." (They themselves *underrate* "P. and P," no doubt deliberately.) When first I read *Emma*, clearly I was not fit for her, or probably for her author. I was in the "Rodney Stone" stage of boyhood. That first impression (unfavourable) probably coloured subsequent readings until this latest. Yet it is a sorry confession for a man of letters (in some sort) to admit that he had to be *directed* to the view of a masterpiece in its right light.

No such guidance was necessary with "P. and P." I presume my first reading of it was more happily conditioned—though I was very young. *Emma* is immense, almost word perfect—*prima inter pares* with "P. and P.," "M.P." (etc., etc. ?) I apologise to Jane, to *Emma*, to G.B.S. and S.K.S. This is not a literary discovery. It is a humiliating personal experience and confession. All tastes are good—and outrageous!

Dr. Thorne.—And from Highbury to Barchester. I am often told that *Dr. Thorne* is the most "modern" of the Barchester series. I know it has been perhaps the most read and popular. Trollope himself said so, and was not surprised at its popularity. He thought well of it in his quiet, restrained way (though his pride in *The Three Clerks* rather jolts him as a critic of Trollope in my estimation).

Without a doubt, it is the best of his plots. He seldom worried about plots. He would build like the masons of Christchurch Priory—start at the east end and hope for the best and a squared-off west end! It's interesting to find that the plot of *Dr. Thorne* was the work of his brother—a pity that brother was not oftener called in. It's a perfect plot—so good that my mouth waters to imagine how Jane Austen would have dealt with Lady Arabella in the dénouement of Mary Thorne's fortune ("£14,000 a year"), or Wilkie Collins have stepped up interest in Scratcherd's wills and codicils.

Yet the restraint and moderation with which Trollope lowered the proud and set up the humble and did his job on the Judgment Seat, are nearer to the truth of human converse. If that moderation sometimes irritates us, it is proof that we demand something more than realism from novelists: we insist on the element of fairy-tale in the novel—as a rule. No doubt at all, *Dr. Thorne* is the "most modern" of the Barchester half-dozen, because (if for no other reason) Mary Thorne is least remote from the young woman of our day.

She did not bow to convention and the elders' tyranny even as much as did Lucy Robarts. Nor sit among the tombstones of dead memories as did the unspeakable Lily Dale. These three, I think, were Trollope's first favourites among his ingénues. How different their natures! I would have Lily Dale, Johnny Eames' prudish strip-tease, whipped at the cart-tail from Allington to Barchester, a warning to wantons. I could wish Lucy had had a little more of her brother's reckless selfishness, though none of his insufferable weakness and bone-headedness. But Mary Thorne is up-to-snuff, even among the young ladies of our own pre-war and post-war days, and blessed with the beautiful discipline and unselfishness and manners of her own day.

Trollope's Complexes.—Trollope's auto-biography—so frank, so revealing and once so devastating to his own reputation—tells us much of his own experience of life, but sometimes we learn even more between the lines of his novels. It is, I should say, very clear from these that in his youth bitter experiences gave him two dominant complexes.

We know that his father was often in debt and his father's failure a lesson to the family. But clearly Anthony himself must have sometimes had recourse to the moneylenders—with bitter memories as a legacy—so frequent and so pregnant are his references to "paper," bills, jew-bill-brokers and renewals. His "Do be punctual" is a vivid, personal memory. And he must have suffered also at the hands of some proud nobleman! His dukes are admirable creations, true to the life of the day, as Disraeli's are not. But that dinner at Gatherum, when the Duke treated his county neighbours like labourers at a harvest supper, speaks clearly of a personal and bitter experience of the pride of the great, felt by a susceptible and sensitive nature. And a score of other instances in the novels suggest the same complex.

I hazard the guess that young Anthony backed in his youth a bill for £200 with all the weakness and vanity which induced Robarts and Finn to do the same thing, to the fury and irritation of all common-sense readers.

We may judge that the snobbery of the 1850's was equally compounded of the pretences of rank *and* of fortune. The snob must not only pretend to be a gentleman; it was equally important to pretend to be a gentleman of means. Did snobbishness ever reach a higher mark than in England in 1850? Did idleness in a privileged class ever reach a higher mark than in the England of 1815? The Barchester novels and Jane Austen's seem to give the answer—in the negative.

And one last by-path in my ramble. What a mercy it is that Jane Austen was not compelled to issue (like Trollope and Thackeray) in fortnightly instal-ments. The dual plots of some of the Barchesters, utterly separable, one good and one bad, are proof of the evil. So, of course, is *Esmond's* unique homogeneity. Jane had no such handicap to interrupt the flow of her genius. For all that, I still maintain that *Sense and Sensibility* is not in the same class with her others; and that Trollope's approval of *The Three Clerks* proved him as a critic blind to cardinal faults in a novelist, viz.: that terrible insertion of the tale of Macassar and Grinoline, and those deplorable author's apostrophes.

The New London Stage Productions

Reviewed by PHILIP PAGE

THE STUDENT PRINCE (Stoll).—Revivalitis seems to be the prevailing epidemic in the London Theatre. Perhaps "epidemic" is too strong a word, for some of these productions have charming qualities. The size and shape of the theatre added to the charm of *The Student Prince*, since it enabled a large orchestra and chorus to be engaged, the latter very gay and gorgeous in the costumes of the "Old Heidelberg" era. (How this can be done in wartime, Heaven and Mr. Bernard Delfont, who presents the piece,

"THE WINTER'S TALE" IN REGENT'S PARK: Three of the characters seen during a recent dress rehearsal at the Open Air Theatre. From left to right are Miss Olga May as Dorlas, Miss Joan Dawling as Hamillius and Miss Evelyn Barnard as Emylia

alone know.) Mr. Bruce Trent, as the Prince sang and acted well and looked sufficiently princely. I was rather sorry for those who had to attempt to put some humour into a singularly unfunny libretto.

The Quaker Girl (Coliseum).—This musical comedy wears rather better—certainly as a play, and I am not among those who rank Romberg's music as so much above that of our own Lionel Monckton. Many of the tunes are still as catchy as they were in 1910, and this odd mixture of Quaker dresses of the seventeenth century and England and Paris of 30 years ago serves well enough. Miss Celia Lipton is in every way a worthy successor to that idol of Edwardian London—Miss Gertie Millar; I have never met a real Quaker girl, but I doubt whether any of them are as delightful as Miss Lipton (nor do they have to be). Brilliant comedy came from Miss Ivy St. Helier and Mr. Wal Bryan added to the fun on London lines.

A STRAUSS OPERETTA AT THE CAMBRIDGE THEATRE: Although written in 1884, this is the first production in London of *A Night in Venice*, which abounds with attractive settings and the typical music of Johann Strauss. Above are seen Daria Bayan as Annina and Dennis Noble as her peasant lover

The Winter's Tale (Open Air, Regent's Park).—I wish I could be more enthusiastic about plays performed in the open air—even Shakespeare's plays and even when the weather is perfect. There always seem to be distracting noises (the drone of aeroplanes, dogs barking, etc.), and in the case of this revival, devices to enable the audience to hear better only seemed, from where I was sitting, to make matters worse. All the more honour to a clever company for making the best of a difficult job—and *The Winter's Tale* is one of the most difficult of plays. The "clowns" worked away to make things cheery, and sometimes succeeded. Mr. Ernest Milton is as good a Leontes as I have ever seen, and in the same class are Miss Cecily Byrne (Hermione) and Mr. Wilfrid Fletcher (Polixenes). But my first prize goes to Miss Vivienne Bennett as Paulina.

The Shoemaker's Holiday (Lyric, Hammersmith).—I am glad this pretty, cosy theatre has been at last reopened after being closed for years. Dekker's old comedy is typically sixteenth century, and taste in humour changes. I could not laugh very heartily, but a capable company give a very jolly performance.

PSYCHOLOGY IN TECHNICOLOR: Two of the chief actors in the new film now showing at the Plaza—"Lady in the Dark." Above is Miss Ginger Rogers, who takes the part of the inhibited editress of a fashion magazine who works her way out of a mental blind alley through a psycho-analyst's interpretation of her dreams. Ray Milland is seen on the left as he appears in one of the latter. The whole film is brilliantly photographed in colour

INVASION SIDELIGHTS

Before, and During, the Great Journey to Northern France

THE TANK-MEN PREPARE : The regimental band plays to the crews as they stow their ammunition on board a few hours before setting off. Some of these men are veterans of Dunkirk. When this picture was taken they were checking over every last item

THE C.-IN-C. WATCHES the Fleet sail out. Admiral Sir Bertram Ramsay on the bridge of a motor torpedo-boat as the ships put out into the English Channel

THE KING AND MR. CHURCHILL AT AIR HEADQUARTERS. The Prime Minister is signing the Visitors' Book, whilst the King looks on. Air Chief-Marshal Sir Trafford Leigh-Mallory is on the right. The distinguished visitors were able to follow the minute-by-minute sequence of events in the underground Operations Room as the Battle for Europe opened

IN A CINEMA CAR-PARK, Nissen huts were put up to be used as mess-rooms for the troops during the days of waiting before invasion. From here, the men went straight on to the landing craft

WATCHING THE WEATHER—A most important job throughout the whole operation. This recorder apparatus is installed in St. James's Park

IN THE OPS. ROOM at Coastal Command H.Q., June 6. From left to right : Air Chief-Marshal Sir Sholto Douglas (Commanding Coastal Command, who provided air cover for the invasion fleets) ; Air Vice-Marshal A. B. Ellwood (Senior Air Staff Officer) ; Captain D. Peyton Ward, R.N. (Senior Naval Liaison Officer) ; and Lieut. J. Sobieski (U.S. Navy Liaison Officer)

AIRBORNE TROOPS MADE THE FIRST LANDINGS. The whole operation was planned with the greatest precision, the result of many months of careful training. Here paratroops are being briefed before the take-off. These men were the first to land in France

THE FIRST OF MANY : A night intruder pilot and navigator are interrogated on their return from the beachhead areas after an operational sortie during the landings

AT THE MINISTRY OF INFORMATION : Correspondents busy typing their first invasion stories on the morning of June 6 after the news had "broken." A steady flow of reports came from war reporters actually in France

IN THE DARKNESS OF NIGHT : Paratroops (on right) emplaning in the big troop-carriers, watched by the aircraft's R.A.F. crew (on left). They arrived over the enemy coast in the early dawn on June 6, with faces blackened and helmets camouflaged

PAY PARADE FOR AIRBORNE TROOPS. Each man received money for use after landing. The sum was 200 francs, to prevent dislocation amongst the civilian population

IN THE LONDON STREETS : In Piccadilly Circus crowds of men and women read the first news of the invasion in the early editions of the evening papers. The newsvendors were faced with long queues everywhere and were very quickly sold out

The World of Books—By Vernon Fane

"D-DAY" IN THE MEDITERRANEAN

John Gunther's Record of the Sicilian Landings; Adventures with a Headache; Pre-War Algeria; A Good Spy Story; A New Novel by Kathleen Noakes; Murder Most Foul

AS I write this, the evening newspaper are carrying staring headlines of the invasion of Europe, and in front of me lies an orange-jacketed book proclaiming with equal emphasis that this is D-DAY (Hamish Hamilton. 10s. 6d.). In point of fact, the D-Day (military term for the day set in advance for the opening of an operation) to which Mr. John Gunther refers was the crucial date of the Sicilian landings, but one cannot help congratulating the publisher on the chance in timing.

The book is the first purely personal record that Mr. Gunther has written of his wanderings. It could be, and thankfully isn't, sub-titled Inside Egypt, Inside Malta, Inside Algiers, Inside Turkey and Inside Every Accessible Headquarters. The writer

POET IN BATTLEDRESS: Squadron Leader John Pudney, an official R.A.F. writer and a well-known poet, attended a recent exhibition of R.A.F. armament and equipment in the Castille Square of Valetta. The occasion was the twenty-fifth anniversary of the R.A.F. During his tour of Malta Squadron Leader Pudney collected material for a book about the island's air battles. Above he is seen with the Hon. Mabel Strickland and her young nephew, George de Trafford (on left) and with Flight Lieut. Dunlop, Guard Commander of the R.A.F. Regiment (on right)

left New York in June 1943 and got back in September. In that time, he had whizzed round the map at a high rate of speed, taken assiduous notes and made a number of friendships. The last activity was characteristic of Mr. Gunther, who is not only a good reporter, but a very friendly soul.

Before he set out on his trip, Mr. Gunther asked thirty-odd distinguished people (he lists them) this question: "If you were going abroad this summer and hoped to see some action, where would you go?" As a result, he got every kind of answer from a vague sweep of the hand to a terse—and misleading—"Be in Istambul by August 1st." But perhaps the best advice came from the man who said: "Hell, you 'll see action *any*where."

A BREEZY WEDDING: Lieut.-Colonel B. B. N. Wood, the bridegroom, makes an attempt to catch his bride's veil when caught by the breeze on leaving St. Paul's, Knightsbridge, after their wedding. The bride was Miss Diana Elizabeth Russell

Finally, he plotted his own route, which began with Algiers via Scotland, and led him all round the Mediterranean.

Naturally, the chapter that will interest us most over here is the one which he devotes to a sketch of two of our great Generals, Montgomery and Alexander. Of the first, he writes that his rules for leadership were three. "First, no failure can be tolerated. Since failure is inadmissible, the scope of operations must be limited to what is practicable. Second, the General in command must not be prodded into anything too grandiose for the means at his disposal. Third, the General must refuse to be rushed. He must be allowed to pick his own time. No matter what the pressure may be—and sometimes pressure is enormous—he must set himself against anything premature."

Of General Alexander, Mr. Gunther's admiration is almost ecstatic. "Take one look at him," he writes enthusiastically, "the serene poised head, the carefully immaculate manner—and you instantly say to yourself the word: aristocrat. Nor do I mean this in the snobbish sense of the term. I mean aristocracy in the sense of personal, not social, superiority—superiority in brains, courage, taste and style. . . . Nothing ever ruffles Alexander. He was the last man off the beach at Dunkirk: he coasted about in a motor-boat seeing that everybody else was off. But he did it in his usual quiet way. He is as unspectacular as Montgomery is spectacular."

There is no writer for whom I feel greater sympathy than Miss Ursula Bloom; a state of affairs chiefly brought about because of her very acute sufferings with migraine headaches. In other words, I know just how she feels, and if she cares to devote a whole book to a discussion of her struggles with them and with the specialists who attempted to cure them, I am with her page by page.

NO LADY IN BED (Chapman and Hall. 12s. 6d.) might be a misleading title, for if, as Miss Bloom suggests, you think "that you are about to read one of those gay books for sale at the less scrupulous booksellers, you are going to be disappointed. I am not that sort of no lady." Instead of that the book is an account—and a very amusing and chatty account—of the writer's attempts to cure her perennial headaches, or to have them cured by the experts. Chapter by chapter Miss Bloom takes the reader through her experiences of attempted cures by aspirin, by faith, by surgical operations, by hypnotism, by "psychology," by a treatment not unlike Chinese water-torture, and even by the wearing of an amulet. The hypnotism was almost the funniest incident of all, since it ended with the writer and her husband crawling out from a lecture unobserved, as they hoped, and on all fours.

Miss Bloom has the courage to write of these disappointing experiments blithely and with entertaining digressions. I heartily wish that the end of the volume could be the account of a sensational cure, but that is apparently not yet.

ALGERIAN ADVENTURE (Allen and Unwin. 21s.) has, in spite of its title, no warlike implications. It is the record of a journey made before the war by two English girls who wanted to discover Morocco and Algeria for themselves. They had two months and £60 between them, and but for these limitations, as Miss Joy Collier proudly claims, "we could not doubt have discovered some portion of the earth's surface not already tramped over by Peter Fleming."

In spite of these difficulties, however, Miss Collier and her companion set out in March with the assets of youth, enthusiasm and an indomitable sense of humour that made light of most of the physical discomforts. The author of their travel log is an artist, and forty or fifty of her drawings (excellent) and photographs (very indifferent) illustrate the volume, which is written with an engaging lack of self-consciousness and a disarming candour. Strangest of all, the travellers arrived home with the same friendly feelings towards each other as when they had started; still delighted with each other, enthusiastic and filled with a sense of achievement.

"Why? We had in actual fact achieved nothing; in retrospect our adventures were of the mildest order; our factual knowledge had not been materially increased; we had no information to offer the public on the 'Flora and Fauna of the Atlas Mountains,' 'The Sex Life of the Berber,' or any such interesting subjects."

Perhaps not, but they had had two months of careless pleasure, and the writer has been able to convey some of that happiness and uncalculating enjoyment.

SECOND FRONT—FIRST SPY (Gollancz. 8s. 6d.) may not be a very convincing story about any kind of second front, as we now know it, but it *is* a good spy story, with all the classic paraphernalia of nation-wide organisations and unlikely suspects. Mr. Bernard Newman does this kind of thing particularly well, because he writes with the necessary dash, and invests his French detective Pontivy with all the colourful attributes that such a character needs to be memorable in detective fiction.

Papa Pontivy's assignment in this story is to trace the German spy organisation that was responsible for the hitches in the Dieppe commando raid. The first Canadian soldier back from that expedition said, "Dieppe was a good show, but it wasn't a surprise." It was up to Papa P. to find out why. To many sleuths this would have seemed an insuperably difficult job, but not to the man who was, the Germans knew, after Churchill, their most dangerous enemy in Britain!

AN AMERICAN FIGHTER PILOT CARRIES HIS BRIDE OVER THE DRAWBRIDGE at Oxburgh Hall, Norfolk, after their wedding in the private chapel there. Major Earl Abbott, a fighter pilot of the U.S. Air Forces in England, married 2nd Lieut. Florence de Luca, of the American Red Cross, in the private chapel of Sir Edmund and Lady Bedenfield's home, Oxburgh Hall, Stoke Ferry, a few days ago. Major Abbott received his promotion from Captain as he arrived at the church, his brother-officers having kept it a secret until that moment. They brought a uniform with a Major's star on it, and presented it to him on the doorstep of the chapel. He met his wife when he was dangerously ill in an Army hospital: she nursed him back to health

The characters in Miss Kathleen Noakes' novel, LAMPS AT MORNING (Hutchinson. 8s. 6d.), are painted in the clear and uncompromising colours of a child's paintbox. Jane is a good girl, a woman of character; Sandra, an ambitious young actress, prepared to sacrifice much to her career. Both of them are in love with Paul, who is not worth the gin he needs for each evening's entertainment.

Paul eventually marries Jane, who quite literally goes through fire for him in an attempt to rescue him from a burning house. Happily, she is unsuccessful and he smoulders quietly and fatally away, leaving her to marry a far better man with that irresistible touch of grey at the temple.

DEATH CAME BACK (Stanley Paul. 8s. 6d.) is the story of a grim type who not only sends his best friend to prison, but tidies up all loose ends by murdering him as soon as he comes out. Fate and the author, Mr. Charles Kingston, catch up with this unmanly fellow, since the corpse is identified as the murderer himself, and as a result he loses his money, his identity and any chance of claiming a later inheritance. After a long series of crimes, he ends on the scaffold, where he breathes the best line of the whole story. "I am glad it 'll soon be all over," he says, and there are those who could echo him.

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NIPPED IN THE BUD

THE British countryside can show few sights more charming than an orchard in blossom. Yet its promise may never be fulfilled. The brief but glorious period between bud-break and petal-fall is critical. Bugs as well as buds awake to life in spring, and the eggs of insects hatch out as well as those of birds. Against their menace the fruit-grower must be prepared. He turns to the labours of the research chemist made available in the products of the British chemical industry. In fruit-growing, unlike warfare, defence is the best method of attack. The professional opens the battle in autumn by girdling the trunks with sticky compounds to prevent wingless moths from crawling up to lay their eggs in twig and branch. In winter, when the trees are dormant, he applies a "winter wash" to destroy insect eggs and pests hibernating in the bark. Lime wash and cresylic or caustic soda solutions were used for this purpose until, in 1921, the British chemist provided a far superior article — tar oil distillate, which is now indispensable in orchard routine. Pests which escape are met in spring by a barrage of chemical sprays. The usual method is to apply lime, sulphur or Bordeaux mixture (copper sulphate and lime) to prevent "scab," a fungus disease of apples and pears which blasts the foliage, blemishes the fruit and blisters the bark. Lead arsenate may be added as a stomach poison for beetles and caterpillars, nicotine to kill sucking insects like greenfly, and chemical wetting agents to make the spray spread evenly. The campaign closes in summer when pests meet a dusty end from derris or nicotine powders—notably the young larvæ of the Codlin moth which so neatly tunnel apples to the core. Spring, summer, autumn and winter, the fruit-grower relies on the chemical industry to help him produce fruit without blemish and in full measure.

ICI

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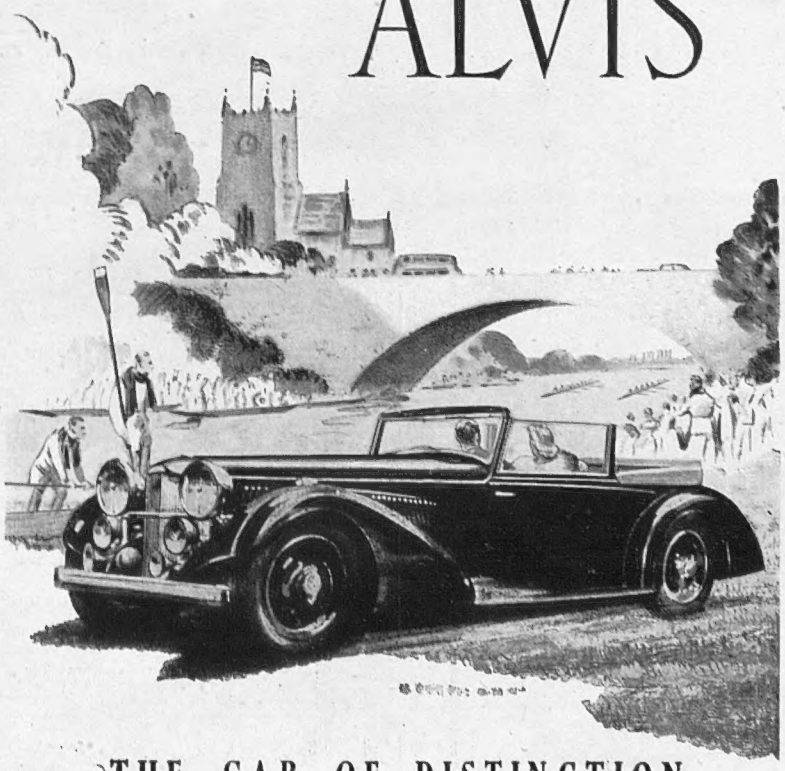

THE CAR OF DISTINCTION

"I come here to-day

to sincerely—shall I say, *honestly?*—inform you . . ." At the end of the speech, I said to my friend, "Interesting, but the old boy had a nice line in split infinitives! Now, if I were going to speak—let's say about the *I.V.* Pressure Controller because you've asked me to explain it to you—I'd say: The *I.V.* Controller harnesses steam, gases and liquids at a pressure above that of the atmosphere. It's a wonderful application of a law of nature—Boyle's Law. The *I.V.* Pressure Controller is both *Instantly Variable* and *Infinitely Variable*. On important war work today, it will play in the post-war world a large part in effecting internal economies in shipping, chemical, refining and other industries. In conclusion, I would suggest that for further information, the best course is to straightaway write to the makers—the Bell Punch Company." My friend corrected me gently. "Straightaway *to* write," he said. "And I shall!" he added.

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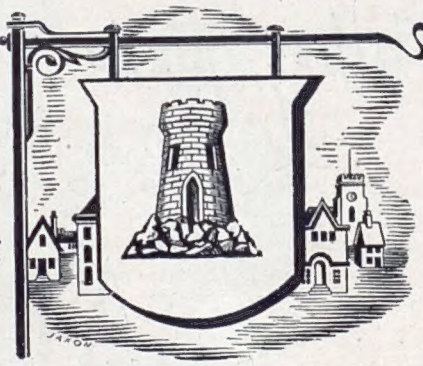

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